

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 11:55:12 AM  
**To:** Niebling, William [Niebling.William@epa.gov]  
**Subject:** Re: STATUS UPDATE-Lead Strategy

Thanks. CBC is off because of dem caucus on bbb

On Oct 28, 2021, at 7:07 AM, Niebling, William <Niebling.William@epa.gov> wrote:

OMB has cleared.

On Oct 27, 2021, at 7:16 PM, Jordan, Deborah <Jordan.Deborah@epa.gov> wrote:

Step 1 was completed at 3 pm EDT; we're fairly certain step 2 happened shortly thereafter. We expect step 3 to happen later this evening or tomorrow a.m.

Anything to add, William?

Thank you all for your help.

Deborah Jordan, Ph.D.  
Deputy Regional Administrator/Acting Regional Administrator  
U.S. EPA Region 9 / Pacific Southwest  
75 Hawthorne Street (ORA)  
San Francisco, CA 94105  
415-297-5237 (mobile)

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**From:** Cassady, Alison <Cassady.Alison@epa.gov>  
**Sent:** Wednesday, October 27, 2021 4:02 PM  
**To:** Niebling, William <Niebling.William@epa.gov>  
**Cc:** Utech, Dan <Utech.Dan@epa.gov>; Waterhouse, Carlton <Waterhouse.Carlton@epa.gov>; Jordan, Deborah <Jordan.Deborah@epa.gov>; Fox, Radhika <Fox.Radhika@epa.gov>  
**Subject:** Re: STATUS UPDATE-Lead Strategy

What the current status of this?

Thanks,  
AC

Alison L. Cassady  
(202) 941-6036

On Oct 27, 2021, at 3:04 PM, Niebling, William <Niebling.William@epa.gov> wrote:

fyi

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**From:** Snyder, Raquel <Snyder.Raquel@epa.gov>  
**Sent:** Wednesday, October 27, 2021 3:01 PM  
**To:** Niebling, William <Niebling.William@epa.gov>  
**Cc:** Levine, Carolyn <Levine.Carolyn@epa.gov>  
**Subject:** STATUS UPDATE-Lead Strategy

Good afternoon,

As promised, a quick update on the OMB call concerning this matter. We seem to finally be back on track and the draft strategy/report should clear OMB before tomorrow but before that happens, three things must transpire:

- 1) EPA provides to OMB the most current draft, final tweaks being made now by OLEM;
- 2) OMB will send the doc and close the loop with HHS and HUD;
- 3) After 1 & 2 occur, OIRA will review the final doc and clear barring any unforeseen issues.

Many thanks,

Raquel Snyder  
Congressional Liaison  
U.S. EPA/Office of Congressional Affairs  
(202)564-9586

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 12:47:35 PM  
**To:** Hoover, Zealan [Hoover.Zealan@epa.gov]; Cassidy, Alison [Cassady.Alison@epa.gov]  
**CC:** Monger, Jon [Monger.Jon@epa.gov]  
**Subject:** RE: Briefing Book -- Draft briefing memo for the Administrator

Can you send the final? ty

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**From:** Hoover, Zealan <Hoover.Zealan@epa.gov>  
**Sent:** Wednesday, October 27, 2021 12:20 PM  
**To:** Cassidy, Alison <Cassady.Alison@epa.gov>; Utech, Dan <Utech.Dan@epa.gov>  
**Cc:** Monger, Jon <Monger.Jon@epa.gov>  
**Subject:** RE: Briefing Book -- Draft briefing memo for the Administrator

Hi Alison -- Attached is the shorter version that is going into the Administrator's book this afternoon. If you could help with a few bullets on pg. 2 that capture your best understanding of what may come that would be much appreciated.

Thanks,  
Zealan

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**From:** Cassidy, Alison <Cassady.Alison@epa.gov>  
**Sent:** Wednesday, October 27, 2021 12:18 PM  
**To:** Utech, Dan <Utech.Dan@epa.gov>; Hoover, Zealan <Hoover.Zealan@epa.gov>  
**Cc:** Monger, Jon <Monger.Jon@epa.gov>  
**Subject:** RE: Briefing Book -- Draft briefing memo for the Administrator

Several items are fairly out of date and may be even more out of date by Friday, but I will do my best ASAP

Alison L. Cassidy  
Deputy Chief of Staff for Policy  
U.S. Environmental Protection Agency  
Cell: (202) 941-6036

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**From:** Utech, Dan <Utech.Dan@epa.gov>  
**Sent:** Wednesday, October 27, 2021 8:43 AM  
**To:** Hoover, Zealan <Hoover.Zealan@epa.gov>  
**Cc:** Monger, Jon <Monger.Jon@epa.gov>; Cassidy, Alison <Cassady.Alison@epa.gov>  
**Subject:** RE: Briefing Book -- Draft briefing memo for the Administrator

alison can you take a look at the reconciliation summary – you're likely more current than william

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**From:** Hoover, Zealan <Hoover.Zealan@epa.gov>  
**Sent:** Wednesday, October 27, 2021 8:41 AM  
**To:** Utech, Dan <Utech.Dan@epa.gov>  
**Cc:** Monger, Jon <Monger.Jon@epa.gov>  
**Subject:** RE: Briefing Book -- Draft briefing memo for the Administrator

Thank you, Dan. To your question about budget reconciliation, I was using the attached memo that Radha and Maria pulled together earlier this month based on TA provided. When I checked with William yesterday he did not have new

specifics on what is in or out. He is on the manifest for Friday and can share the latest he's hearing on this section as well.

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**From:** Utech, Dan <[Utech.Dan@epa.gov](mailto:Utech.Dan@epa.gov)>  
**Sent:** Wednesday, October 27, 2021 8:05 AM  
**To:** Hoover, Zealan <[Hoover.Zealan@epa.gov](mailto:Hoover.Zealan@epa.gov)>  
**Cc:** Monger, Jon <[Monger.Jon@epa.gov](mailto:Monger.Jon@epa.gov)>  
**Subject:** RE: Briefing Book -- Draft briefing memo for the Administrator

Generally looks good – moved a few things around, made a few edits and asked a few questions.

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**From:** Hoover, Zealan <[Hoover.Zealan@epa.gov](mailto:Hoover.Zealan@epa.gov)>  
**Sent:** Tuesday, October 26, 2021 4:33 PM  
**To:** Utech, Dan <[Utech.Dan@epa.gov](mailto:Utech.Dan@epa.gov)>  
**Cc:** Monger, Jon <[Monger.Jon@epa.gov](mailto:Monger.Jon@epa.gov)>  
**Subject:** Briefing Book -- Draft briefing memo for the Administrator

Dan,

We have briefing time with the Administrator this Friday to discuss infrastructure and reconciliation prep. Materials are due to his book tomorrow afternoon. I've attached a draft memo for your review and feedback. Janet is review concurrently.

Thanks,  
Zealan

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Zealan Hoover  
Office of the Administrator  
U.S. Environmental Protection Agency  
Cell Phone: (202) 306-6891



Message

**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 12:54:34 PM  
**To:** Lance, Kathleen [Lance.Kathleen@epa.gov]; Morgan, Ashley [Morgan.Ashley.M@epa.gov]  
**Subject:** FW: Adm. Regan Avail for BBB/BID Interviews  
**Attachments:** BBB Message Frame.docx; BID and BBB Win TPs.docx; BBB TPs by Policy.docx

Can you print these for the Administrator?

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**From:** Hamilton, Lindsay <Hamilton.Lindsay@epa.gov>  
**Sent:** Thursday, October 28, 2021 8:21 AM  
**To:** Utech, Dan <Utech.Dan@epa.gov>; Cassidy, Alison <Cassady.Alison@epa.gov>; Blythers, Dorien <Blythers.Dorien@epa.gov>; Lance, Kathleen <Lance.Kathleen@epa.gov>; Morgan, Ashley <Morgan.Ashley.M@epa.gov>  
**Cc:** Conger, Nick <Conger.Nick@epa.gov>  
**Subject:** FW: Adm. Regan Avail for BBB/BID Interviews

First TP docs I've seen, plus ask for interviews from WH for interview availability.

**Kathleen/Ashley** – can we get some availability for the Administrator through Monday? AM/PM/dayside and weekend all on the table.

Would be good if we can also discuss with him.

Thanks!  
Lindsay

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**From:** Saez, Mariel S. EOP/WHO **Ex. 6 Personal Privacy (PP)**  
**Sent:** Thursday, October 28, 2021 8:14 AM  
**To:** Hamilton, Lindsay <Hamilton.Lindsay@epa.gov>; Conger, Nick <Conger.Nick@epa.gov>; Carroll, Timothy <Carroll.Timothy@epa.gov>  
**Cc:** Berner, Kate K. EOP/WHO **Ex. 6 Personal Privacy (PP)**; Tobar, Pili D. EOP/WHO **Ex. 6 Personal Privacy (PP)**; Matthew Hill **Ex. 6 Personal Privacy (PP)**; Dorsey, Rykia G. EOP/WHO **Ex. 6 Personal Privacy (PP)**; Molina, Jennifer EOP/WHO **Ex. 6 Personal Privacy (PP)**; Riley, Emma E. EOP/WHO **Ex. 6 Personal Privacy (PP)**  
**Subject:** Adm. Regan Avail for BBB/BID Interviews

Hi team EPA,

# Ex. 5 Deliberative Process (DP)

Please let us know if you have any questions.

Thanks,  
Mariel

Mariel Sáez  
Director of Broadcast Media | the White House

Ex. 6 Personal Privacy (PP)

## **Build Back Better Message Frame**

Joe Biden believes to his core that there's no greater economic engine in the world than the hard work and ingenuity of the American people. But for too long, the economy has worked great for those at the top, while working families get squeezed. **President Biden promised to rebuild the backbone of the country – the middle class – so that this time everyone comes along.** The Build Back Better framework does just that.

The Build Back Better framework will level the playing field and make corporations and the wealthiest pay their fair share, so that middle class families can finally get some breathing room. It is a transformative investment in climate, care, and kids that will lower the costs of things families depend on, help people get back to work, and grow the economy.

**President Biden campaigned on a promise to forge consensus and make government work for working people again. Today, he is delivering on that promise. President Biden heard input from all sides and announced a Build Back Better framework he is confident will pass through Congress and be signed into law, delivering generational investments in the economy for working people.**

This framework will be the most transformative investment in children and caregiving in generations – transforming the lives of millions of children, saving parents thousands of dollars, and adding two years of free, universal schooling to our education system for the first time in over 100 years. It will be the largest effort to combat climate change in history. It will cut taxes for tens of millions of middle class families. It is the biggest expansion of affordable health care in a decade. As the President said, it's a big darn deal.

**Children & Caregiving:** Preschool, child care and care for older loved ones is prohibitively expensive for middle class families. Build Back Better will deliver two years of free preschool for more than 6 million children – which costs an average of \$8600 per year – and increase the quality of preschool for many more children already enrolled. Research shows that every \$1 invested in high-quality early childhood care and education can yield \$3 to \$7 over the long-run, in the form of improved health and education outcomes, increase likelihood of being employed, and higher earnings in adulthood. The last time America added years of free schooling was more than 100 years ago. This is an investment in our kids and in our competitiveness. Build Back Better will ensure that no middle-income family pays more than 7% of their income on child care and will help states expand access to high-quality, affordable child care to about 20 million children per year. The framework also delivers affordable, high-quality care for older Americans and people with disabilities in their homes, while supporting the workers who provide this care. And, Build Back Better will give 39 million families a major tax cut by extending the expanded Child Tax Credit. This is a historic proposal that will save middle class families and enable families to work and succeed in the economy.

**Climate:** Scientists have been warning us for years that extreme weather is going to get more extreme. We're living it in real time now. Extreme weather cost America \$99 billion last year. Build Back Better will cut greenhouse gas emissions by well over one gigaton in 2030, reduce consumer energy costs, give our kids cleaner air and water, create hundreds of thousands of high-quality jobs, and advance environmental justice by investing in a 21<sup>st</sup> century clean energy economy – from buildings, transportation, industry, electricity, and agriculture to climate smart

practices in our lands and waters. The framework expands access to rooftop solar and home electrification, cutting the cost of installing solar for a home by around 30% and shortening the payback period for a family by around 5 years. And, BBB will create manufacturing credits for solar and on shore and off shore wind, creating millions of good-paying jobs building clean energy technology. These investments will ensure that we can meet our goal of reducing greenhouse gas emissions between 50 and 52 percent below 2005 levels by the year 2030.

**Health Care:** Before the American Rescue Plan, even people with health insurance struggled to pay their premiums. About 30 million people were uninsured in 2019 before President Biden took office, and coverage under the ACA (even with the premium subsidies) was too expensive for many families. The President believes no one should lie in bed wondering “what will I do if she gets cancer” or “will I go bankrupt.” Build Back Better will reduce premiums for more than 9 million Americans by extending the expanded Premium Tax Credit, deliver health care coverage to up to 4 million uninsured people in states that have locked them out of Medicaid, and help older Americans access affordable hearing care by expanding Medicare.

Build Back Better will improve our immigration system consistent with the Senate’s reconciliation rules.

And, the framework will reduce the deficit. Build Back Better is **paid for by rewarding work, not wealth** – and ensuring that the super-wealthy and corporations **pay their fair share** and can’t cheat on their tax bills. No one making less than \$400,000 will have their taxes raised

Along with the President’s **Bipartisan Infrastructure Deal**, which makes historic investments in equity and in tackling the climate crisis, Build Back Better will create millions of good-paying jobs, ensure that American workers, businesses, and farmers can compete and win in the 21<sup>st</sup> century, and save middle class families money. **President Biden’s agenda will grow the economy so that everyone gets ahead.**

###

**TALKING POINTS: A Vote for the Bipartisan Infrastructure Deal Is a Vote to Create Jobs, Fight the Climate Crisis, Advance Equity, and Ensure America Can Compete**

- The Bipartisan Infrastructure Deal is the most significant long-term investment in the United States' infrastructure and competitiveness in nearly a century.
- A vote for this bill is a vote to create millions of good-paying union jobs, grow our economy, invest in communities that have too often been left behind, advance equity, fight the climate crisis, and position the United States to compete globally and win in the 21st century.
- It includes a number of long overdue wins for the American people:
  - **CLIMATE:** From electrifying America's power grid, building a national network of EV chargers, and making our infrastructure resilient to the impacts of climate change, the bill includes key provisions that advance President Biden's climate plan and represents an important step forward.
  - **ROADS & BRIDGES:** Repairs and rebuilds our roads and makes the single largest investment in our nation's bridges.
  - **TRANSIT:** Makes the largest federal investment in public transit in history to expand public transit options across every state in the country and replace thousands deficient transit vehicles, including buses, with clean, zero emission vehicles.
  - **BROADBAND:** Ensures every American has access to reliable high-speed internet through a historic investment in broadband infrastructure deployment.
  - **RAIL:** Makes the largest investment in passenger rail since Amtrak's creation.
  - **EVs:** Builds a national network of electric vehicle (EV) chargers, a critical step in the President's strategy to fight the climate crisis and in creating good U.S. manufacturing jobs.
  - **CLEAN WATER:** Delivers clean water to millions of families and eliminate the nation's lead service lines, including in Tribal Nations and disadvantaged communities that need it most.
  - **RESILIENCE:** Upgrades our power infrastructure, building new, resilient transmission lines across the country and making the single largest investment in clean energy transmission in American history.
  - **LEGACY POLLUTION:** Invests in environmental remediation and address legacy pollution in American history by cleaning up Superfund and brownfield sites, reclaiming abandoned mines, and capping orphaned gas wells.
- For far too long, Americans have been awaiting this historic investment in our nation's infrastructure and competitiveness. Finally, Congress has a chance to deliver. It's simple: a vote for this legislation is a vote to compete, not fall into complacency; to pursue opportunity, not fall into disrepair and decay; to lead the world, instead of letting the world pass us by.

###

## **TALKING POINTS: A Vote for the Build Back Better Framework Is a Vote to Build an Economy that Works for Everyone**

- **President Biden promised to rebuild the backbone of the country – the middle class -- so that this time everyone comes along. The Build Back Better framework does just that.**
- This framework is a transformative investment in climate, care and kids that will lower the costs of things families depend on, help people get back to work, and grow the economy.
- Specifically, the framework delivers:
  - **AFFORDABLE CARE: The most transformative investment in children and caregiving in generations**, delivering:
    - Two years of free preschool for more than six million children
    - Affordable child care so that no middle-income families pay more than 7% of their income
    - Affordable, high-quality care for older Americans and people with disabilities in their homes, while supporting the workers who provide this care
  - **CLIMATE ACTION: The largest effort to combat climate change in history** that will ensure that we can meet our goal of reducing greenhouse gas emissions between 50 and 52 percent below 2005 levels by the year 2030.
  - **A MIDDLE-CLASS TAX CUT: A historic tax cut for tens of millions of middle-class families**, including giving 39 million families a major tax cut by extending the expanded Child Tax Credit and cutting taxes for 17 million low-wage workers by extending the expanded Earned Income Tax Credit
  - **AFFORDABLE HEALTH CARE: The biggest expansion of affordable health care in a decade**, reducing premiums for more than 9 million Americans and delivering health care coverage to up to 4 million uninsured people in states that have locked them out of Medicaid
- And, the Build Back Better framework is paid for by rewarding work, not wealth and ensuring that the super-wealthy and corporations pay their fair share and can't cheat on their tax bills. No one making less than \$400,000 will have their taxes raised.
- Along with the President's Bipartisan Infrastructure Deal, which makes historic investments in equity and in tackling the climate crisis, Build Back Better will create millions of good-paying jobs, ensure that American workers, businesses, and farmers can compete and win in the 21<sup>st</sup> century, and save middle class families money.
- This is a historic framework that will grow the economy so that everyone gets ahead.

###

## **Build Back Better Talking Points by Policy**

### **CARE**

- The Build Back Better Framework is the most transformative investment in children and caregiving in generations.
- The framework will offer universal and free preschool for all 3- and 4-year-olds -- which will help states to expand access to free preschool for more than 6 million children. Today, families who can afford to send their kids to pre-K pay on average \$8600 per year. Under the framework, the cost will be \$0. This is the most significant national expansion in schooling in a generation.
- The framework will make the largest investment in child care in the nation's history, saving most American families more than half of their spending on child care. It will ensure that middle-class families pay no more than 7 percent of their income on child care and will help states expand access to high-quality, affordable child care to about 20 million children per year.
- A family paying for home care costs out of pocket currently pays around \$5,800 per year for just four hours of home care per week and around 800,000 people are on the waiting list for home care services under Medicaid. The Build Back Better framework will permanently improve Medicaid coverage for home care services for seniors and people with disabilities, making the most transformative investment in access to home care in 40 years, when these services were first authorized for Medicaid.

### **CLIMATE**

- The Build Back Better Framework is the largest effort to combat climate change in American history. This effort, along with the infrastructure deal, will curb well over a gigaton – or one billion metric tons – of America's emissions.
- Extreme weather has increased in frequency and ferocity, destroying homes, schools, and businesses – and costed America more than \$100 billion last year alone. Delayed action will set us back in the global race on manufacturing and innovation and prevent us from harnessing the economic opportunity that this moment represents.
- The Build Back Better Framework will deliver clean energy tax credits and rebates that lowers costs for middle class families, saving American families hundreds of dollars per year in clean energy and lower the cost of an electric vehicle by \$12,500.
- It will also stand up a new Civilian Climate Corps that enlists a new, diverse generation of 300,000 members who will conserve our public lands, bolster community resilience, and address the changing climate – all while putting good-paying union jobs within reach for more Americans.
- And it will ensure clean energy technology – from wind turbine blades to solar panels to electric cars – will be built in the United States with American made steel and other materials, creating hundreds of thousands of good jobs here at home.

- The framework will position us to accomplish the President's goal to reduce emissions by 50-52% from 2005 levels by 2030. And it's more than 10 times more in emissions reductions than any legislation Congress passed, including the Recovery Act.
- It is also the largest investment ever in environmental justice and clean energy manufacturing, ensuring we can grow domestic industries and good-paying, union jobs and making sure no community is left behind.

## **HOUSING**

- President Biden's Build Back Better framework makes the single largest and most comprehensive investment in affordable housing in U.S. history.
- The framework will help reduce price pressures for homeowners and renters by enabling the construction or rehabilitation of over one million affordable homes. More homes – and more affordable housing – means lower prices and better options for working families feeling the pinch of higher housing prices.
- The frame includes one of the largest investments in down payment assistance in history, giving hundreds of thousands of first-generation homebuyers a hand up to help them buy their first home and build wealth for themselves and their families.
- And the Build Back Better framework will also help working families by addressing the long overdue capital needs of public housing in big cities and rural communities, invest in community-led redevelopment projects in under-resourced neighborhoods, and remove lead paint from hundreds of thousands of homes.

## **CHILD TAX CREDIT (CTC)**

- The Child Tax Credit (CTC) is one of the most important tax cuts for working families in more than a generation, and President Biden's Build Back Better framework will extend the American Rescue Plan's expanded CTC, providing 39 million households up to \$3,600 (or \$300 per month) in tax cuts per child.
- Under this framework, the parents of nearly 90 percent of American children will receive \$300 per month per child under six and \$250 per month per child ages 6 to 17.
- This historic tax cut will help cover the cost of food, housing, health care, and transportation and will continue the largest one-year reduction in child poverty in history.
- And critically, the agreement includes permanent refundability for the Child Tax Credit, meaning that the neediest families will continue to receive the full Child Tax Credit over the long-run.

## **HEALTH CARE**



- The Build Back Better Framework is the biggest expansion of affordable health care in a decade.
- President Biden is following through on his promise build on Obamacare, lower health care costs for millions of Americans, and expand access to high-quality, affordable coverage.
- The Build Back Better Framework will reduce premiums for nine million Americans, reducing costs an average of \$600 per person per year. It will close the Medicaid Coverage Gap so nearly four million people in states that refused to expand Medicaid will be able to access tax credits and afford coverage with \$0 premiums. And it will reduce the number of uninsured Americans by seven million.
- It also delivers affordable, high-quality care for older Americans and people with disabilities in their homes, supports workers who provide the care, and expands Medicare so older Americans can access affordable hearing care.
- The Affordable Care Act was a big deal – and so is Build Back Better Framework.

## **TAX FAIRNESS**

- President Biden is committed to fully paying for his Build Back Better framework – and he's going to do it without raising a cent in new taxes for Americans making under \$400,000 a year.
- We're going to do that by finally making our tax code work for the middle-class, not the super wealthy and big corporations who have been able to rig it to their advantage for decades, including through giveaways in the Republicans' 2017 tax law.
- And we're going to use the money we raise by asking the richest Americans and most profitable corporations to pay their fair share to *cut taxes* for working families, and invest in lowering prices for the middle class, improving health care and child care, and tackling climate change.
- Under President Biden's framework, we're going to stop the most profitable big corporations in the U.S. from paying zero in federal taxes – like 55 did in 2019 – and we're going to stop rewarding them for corporate stock buybacks.
- We're going to end the global race to the bottom that incentivizes corporations to ship jobs and profits overseas. The President's framework includes a 15% minimum tax consistent with the landmark agreement reached by 136 countries. This means a level playing field for American workers and companies.
- We'll ask the wealthiest Americans to pay their fair share. While middle class families keep getting squeezed, those at the top have gotten one handout after another. President Biden knows that's wrong, and he's going to close the loopholes they exploit.

- Finally, the President's framework takes on wealthy tax cheats who break the law by hiding their income and not paying what they owe – shortchanging the rest of us in the process. It's not fair for the middle-class to pay their fair share while the top one percent evades \$160 billion in taxes each year. That's why the President's plan cracks down on tax evasion without affecting Americans who make less than \$400,000.

## **EDUCATION BEYOND HIGH SCHOOL**

- President Biden believes education is key to ensuring America's competitiveness in the 21<sup>st</sup> century.
- That's why the Build Back Better framework will make education beyond high school more affordable – including for trainings and apprenticeships.
- The framework will increase the maximum Pell Grants, expand access to DREAMers, and make historic investments in Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and minority-serving institutions (MSIs).
- The framework will increase the Labor Department's annual spending on workforce development by 50% for each of the next 5 years.

## **IMMIGRATION**

- President Biden continues to support all efforts by Senate leadership to put forward alternative proposals for immigration relief consistent with the Senate's reconciliation rules.
- That's why the Build Back Better framework includes a separate \$100 billion investment in immigration reform that is consistent with the Senate's reconciliation rules that will improve our immigration system, as well as enhancements to reduce backlogs, expand legal representation, and make the asylum system and border processing more efficient and humane.

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Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 1:04:54 PM  
**To:** Chiu, Rachel I. EOP/WHO [Ex. 6 Personal Privacy (PP)]  
**Subject:** RE: docs

Thanks and understood

-----Original Appointment-----

**From:** Alex, Cristobal J. EOP/WHO [Ex. 6 Personal Privacy (PP)] On Behalf Of Chiu, Rachel I. EOP/WHO  
**Sent:** Thursday, October 28, 2021 9:01 AM  
**To:** Utech, Dan  
**Subject:** docs  
**When:** Thursday, October 28, 2021 8:00 AM-8:30 AM (UTC-05:00) Eastern Time (US & Canada).  
**Where:** [Ex. 6 Personal Privacy (PP)]

Dan, see attached. Not for sharing.

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 1:18:11 PM  
**To:** Lance, Kathleen [Lance.Kathleen@epa.gov]  
**CC:** Niebling, William [Niebling.William@epa.gov]  
**Subject:** when will he depart for cbc?

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 1:22:55 PM  
**To:** Vahlsing, Candace M. EOP/OMB; **Ex. 6 Personal Privacy (PP)** Ali Zaidi; **Ex. 6 Personal Privacy (PP)**  
**Subject:** CBC

Per WH request Regan is talking to CBC this morning after POTUS talks to the caucus. Is EJ grants in? Other relevant points for that audience beyond what is in the fact sheet?

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 1:32:12 PM  
**To:** Conger, Nick [Conger.Nick@epa.gov]  
**CC:** Cassidy, Alison [Cassady.Alison@epa.gov]  
**Subject:** FW: EJ - "including grants to environmental justice communities."

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**From:** Cassidy, Alison <Cassady.Alison@epa.gov>  
**Sent:** Thursday, October 28, 2021 9:24 AM  
**To:** Utech, Dan <Utech.Dan@epa.gov>  
**Subject:** EJ - "including grants to environmental justice communities."

This is the most specific it gets

**Advance environmental justice through a new Clean Energy and Sustainability Accelerator that will invest in projects around the country**, while delivering 40% of the benefits of investment to disadvantaged communities, as part of the President's Justice40 initiative. The framework will also fund port electrification; facilitate the deployment of cleaner transit, buses, and trucks; and support critical community capacity building, including grants to environmental justice communities. In addition, the framework will create a new Civilian Climate Corps – with over 300,000 members that look like America. This diverse new workforce will conserve our public lands, bolster community resilience, and address the changing climate, all while putting good-paying union jobs within reach for more Americans.

Alison L. Cassidy  
Deputy Chief of Staff for Policy  
U.S. Environmental Protection Agency  
Cell: (202) 941-6036

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 1:36:11 PM  
**To:** Conger, Nick [Conger.Nick@epa.gov]  
**Subject:** FW: just heard the water reconciliaton numbers. they are good. posting at 11am. have you heard them?

## Ex. 5 Deliberative Process (DP)

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**From:** Adhar, Radha <Adhar.Radha@epa.gov>  
**Sent:** Thursday, October 28, 2021 9:34 AM  
**To:** Fox, Radhika <Fox.Radhika@epa.gov>  
**Cc:** Utech, Dan <Utech.Dan@epa.gov>; Cassady, Alison <Cassady.Alison@epa.gov>; Niebling, William <Niebling.William@epa.gov>  
**Subject:** Re: just heard the water reconciliaton numbers. they are good. posting at 11am. have you heard them?

Thanks Radhika, this is what I got-

### Ex. 5 Deliberative Process (DP)

Sent from my iPhone

On Oct 28, 2021, at 9:30 AM, Fox, Radhika <[Fox.Radhika@epa.gov](mailto:Fox.Radhika@epa.gov)> wrote:

Radhika Fox  
Assistant Administrator  
Office of Water  
U.S. Environmental Protection Agency  
[Fox.Radhika@epa.gov](mailto:Fox.Radhika@epa.gov)

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 1:39:58 PM  
**To:** Conger, Nick [Conger.Nick@epa.gov]

<https://twitter.com/bresreports/status/1453715772547735555?s=20>



Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 1:43:16 PM  
**To:** Hoover, Zealan [Hoover.Zealan@epa.gov]  
**Subject:** FW: just heard the water reconciliaton numbers. they are good. posting at 11am. have you heard them?

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**From:** Fox, Radhika <Fox.Radhika@epa.gov>  
**Sent:** Thursday, October 28, 2021 9:38 AM  
**To:** Adhar, Radha <Adhar.Radha@epa.gov>  
**Cc:** Utech, Dan <Utech.Dan@epa.gov>; Cassady, Alison <Cassady.Alison@epa.gov>; Niebling, William <Niebling.William@epa.gov>  
**Subject:** RE: just heard the water reconciliaton numbers. they are good. posting at 11am. have you heard them?

Yes m'am

(b) (5)

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**From:** Adhar, Radha <Adhar.Radha@epa.gov>  
**Sent:** Thursday, October 28, 2021 9:34 AM  
**To:** Fox, Radhika <Fox.Radhika@epa.gov>  
**Cc:** Utech, Dan <Utech.Dan@epa.gov>; Cassady, Alison <Cassady.Alison@epa.gov>; Niebling, William <Niebling.William@epa.gov>  
**Subject:** Re: just heard the water reconciliaton numbers. they are good. posting at 11am. have you heard them?

(b) (5)

Sent from my iPhone

On Oct 28, 2021, at 9:30 AM, Fox, Radhika <Fox.Radhika@epa.gov> wrote:

Radhika Fox  
Assistant Administrator  
Office of Water  
U.S. Environmental Protection Agency  
[Fox.Radhika@epa.gov](mailto:Fox.Radhika@epa.gov)

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 2:35:13 PM  
**To:** Hamilton, Lindsay [Hamilton.Lindsay@epa.gov]; Cassidy, Alison [Cassady.Alison@epa.gov]; Lance, Kathleen [Lance.Kathleen@epa.gov]; Blythers, Dorien [Blythers.Dorien@epa.gov]  
**Subject:** RE: President's Task Force Meeting

Unless the WH wants him on tv at the time of the meeting, I think he should proceed, given that he's a co-chair. Alison – agree?

---

**From:** Hamilton, Lindsay <Hamilton.Lindsay@epa.gov>  
**Sent:** Thursday, October 28, 2021 10:29 AM  
**To:** Cassidy, Alison <Cassady.Alison@epa.gov>; Utech, Dan <Utech.Dan@epa.gov>; Lance, Kathleen <Lance.Kathleen@epa.gov>; Blythers, Dorien <Blythers.Dorien@epa.gov>  
**Subject:** President's Task Force Meeting

Are we moving forward with the children's health task force meeting as-is today? I understand many principals are dropping.

Thanks,  
Lindsay

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 2:36:03 PM  
**To:** Morgan, Ashley [Morgan.Ashley.M@epa.gov]  
**CC:** Lance, Kathleen [Lance.Kathleen@epa.gov]  
**Subject:** RE: Heading Back

I assume he's keeping Cummins on, correct?

---

**From:** Morgan, Ashley <Morgan.Ashley.M@epa.gov>  
**Sent:** Thursday, October 28, 2021 10:28 AM  
**To:** Utech, Dan <Utech.Dan@epa.gov>  
**Cc:** Lance, Kathleen <Lance.Kathleen@epa.gov>  
**Subject:** Heading Back

Hi Dan –

The Administrator is on his way back. Please call with any questions.

Thanks!  
Ashley

**Ashley M. Morgan**  
Deputy Director of Scheduling and Advance  
U.S. Environmental Protection Agency  
Cell: (202) 909-9983

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 2:38:27 PM  
**To:** Lance, Kathleen [Lance.Kathleen@epa.gov]; Morgan, Ashley [Morgan.Ashley.M@epa.gov]  
**Subject:** RE: Heading Back

Meaning he's not planning to attend or he isn't? I'm sure Janet's fine either way.

---

**From:** Lance, Kathleen <Lance.Kathleen@epa.gov>  
**Sent:** Thursday, October 28, 2021 10:37 AM  
**To:** Utech, Dan <Utech.Dan@epa.gov>; Morgan, Ashley <Morgan.Ashley.M@epa.gov>  
**Subject:** RE: Heading Back

Yes, and we have asked Janet to lead. If Janet is unable, then Rosemary said Joe can lead.

Kathleen C. Lance  
Director of Scheduling and Advance  
U.S. Environmental Protection Agency  
Cell: (202) 941-1109

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**From:** Utech, Dan <Utech.Dan@epa.gov>  
**Sent:** Thursday, October 28, 2021 10:36 AM  
**To:** Morgan, Ashley <Morgan.Ashley.M@epa.gov>  
**Cc:** Lance, Kathleen <Lance.Kathleen@epa.gov>  
**Subject:** RE: Heading Back

I assume he's keeping Cummins on, correct?

---

**From:** Morgan, Ashley <Morgan.Ashley.M@epa.gov>  
**Sent:** Thursday, October 28, 2021 10:28 AM  
**To:** Utech, Dan <Utech.Dan@epa.gov>  
**Cc:** Lance, Kathleen <Lance.Kathleen@epa.gov>  
**Subject:** Heading Back

Hi Dan –

The Administrator is on his way back. Please call with any questions.

Thanks!  
Ashley

**Ashley M. Morgan**  
Deputy Director of Scheduling and Advance  
U.S. Environmental Protection Agency  
Cell: (202) 909-9983

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 4:07:29 PM  
**To:** Sean McCluskie [Sean.McCluskie@hhs.gov]  
**Subject:** Children's Health Task Force

Hi Sean - just confirming that Secretary Becerra is planning to attend - there's a lot going on today so just want to make sure. Administrator Regan is still planning to attend but if things change on your end I just want to be able to apprise him. Thanks, Dan

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 4:37:47 PM  
**To:** Harris, Sincere [Harris.Sincere@epa.gov]; Hicks, Destine [Hicks.Destine@epa.gov]  
**Subject:** RE: Harris, Sincere shared "SH\_10-28-2021 EPA\_Weekly\_Cabinet\_Report\_DH" with you.

Looking now. Was pulled in other directions this morning

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**From:** Harris, Sincere <Harris.Sincere@epa.gov>  
**Sent:** Thursday, October 28, 2021 12:37 PM  
**To:** Hicks, Destine <Hicks.Destine@epa.gov>; Utech, Dan <Utech.Dan@epa.gov>  
**Subject:** RE: Harris, Sincere shared "SH\_10-28-2021 EPA\_Weekly\_Cabinet\_Report\_DH" with you.

Hey Dan – good to send?

Sinceré A. Harris  
White House Liaison, EPA  
202-570-5675  


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**From:** Harris, Sincere  
**Sent:** Thursday, October 28, 2021 9:46 AM  
**To:** Hicks, Destine <Hicks.Destine@epa.gov>; Utech, Dan <Utech.Dan@epa.gov>  
**Subject:** RE: Harris, Sincere shared "SH\_10-28-2021 EPA\_Weekly\_Cabinet\_Report\_DH" with you.

Bump

Sinceré A. Harris  
White House Liaison, EPA  
202-570-5675  


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**From:** Harris, Sincere  
**Sent:** Wednesday, October 27, 2021 8:32 PM  
**To:** Hicks, Destine <Hicks.Destine@epa.gov>; Utech, Dan <Utech.Dan@epa.gov>  
**Subject:** Harris, Sincere shared "SH\_10-28-2021 EPA\_Weekly\_Cabinet\_Report\_DH" with you.



**Harris, Sincere shared a file with you**

Here's the document that Harris, Sincere shared with you.



SH\_10-28-2021 EPA Weekly Cabinet Report DH



This link only works for the direct recipients of this message.

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Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 4:40:41 PM  
**To:** Cassidy, Alison [Cassady.Alison@epa.gov]  
**Subject:** ord contribution to the cabinet report

# Ex. 5 Deliberative Process (DP)



Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 4:43:39 PM  
**To:** Harris, Sincere [Harris.Sincere@epa.gov]; Hicks, Destine [Hicks.Destine@epa.gov]  
**Subject:** RE: Harris, Sincere shared "SH\_10-28-2021 EPA\_Weekly\_Cabinet\_Report\_DH" with you.

A couple of deletions and a question in a comment bubble. Once you address the comment it's good to go. Thanks!

---

**From:** Harris, Sincere <Harris.Sincere@epa.gov>  
**Sent:** Thursday, October 28, 2021 12:39 PM  
**To:** Utech, Dan <Utech.Dan@epa.gov>; Hicks, Destine <Hicks.Destine@epa.gov>  
**Subject:** RE: Harris, Sincere shared "SH\_10-28-2021 EPA\_Weekly\_Cabinet\_Report\_DH" with you.

Yea figured you were busy with announcements. No worries.

Sinceré A. Harris  
White House Liaison, EPA  
202-570-5675  


---

**From:** Utech, Dan <Utech.Dan@epa.gov>  
**Sent:** Thursday, October 28, 2021 12:38 PM  
**To:** Harris, Sincere <Harris.Sincere@epa.gov>; Hicks, Destine <Hicks.Destine@epa.gov>  
**Subject:** RE: Harris, Sincere shared "SH\_10-28-2021 EPA\_Weekly\_Cabinet\_Report\_DH" with you.

Looking now. Was pulled in other directions this morning

---

**From:** Harris, Sincere <Harris.Sincere@epa.gov>  
**Sent:** Thursday, October 28, 2021 12:37 PM  
**To:** Hicks, Destine <Hicks.Destine@epa.gov>; Utech, Dan <Utech.Dan@epa.gov>  
**Subject:** RE: Harris, Sincere shared "SH\_10-28-2021 EPA\_Weekly\_Cabinet\_Report\_DH" with you.

Hey Dan – good to send?

Sinceré A. Harris  
White House Liaison, EPA  
202-570-5675  


---

**From:** Harris, Sincere  
**Sent:** Thursday, October 28, 2021 9:46 AM  
**To:** Hicks, Destine <Hicks.Destine@epa.gov>; Utech, Dan <Utech.Dan@epa.gov>  
**Subject:** RE: Harris, Sincere shared "SH\_10-28-2021 EPA\_Weekly\_Cabinet\_Report\_DH" with you.

Bump

Sinceré A. Harris  
White House Liaison, EPA  
202-570-5675  


**From:** Harris, Sincere

**Sent:** Wednesday, October 27, 2021 8:32 PM

**To:** Hicks, Destine <[Hicks.Destine@epa.gov](mailto:Hicks.Destine@epa.gov)>; Utech, Dan <[Utech.Dan@epa.gov](mailto:Utech.Dan@epa.gov)>

**Subject:** Harris, Sincere shared "SH\_10-28-2021 EPA\_Weekly\_Cabinet\_Report\_DH" with you.



## Harris, Sincere shared a file with you

Here's the document that Harris, Sincere shared with you.



[SH\\_10-28-2021 EPA\\_Weekly\\_Cabinet\\_Report\\_DH](#)



This link only works for the direct recipients of this message.

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Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 1:33:40 PM  
**To:** **Administrator Email Ex. 6 Personal Privacy (PP)**  
**Subject:** FW: For the Administrator's Digital Signature: two NESHAP rules  
**Attachments:** SAN 7526 Flex Foam NPRM Action Memo jg SIGNED.pdf; SAN 7526 Flex Foam RTR final rule\_admin.docx; For Administrator's Digital Signature (today): Notice and Opportunity to Comment: Withdrawal of 2 Answers to Frequent Questions About Property Management Companies & the Toxic Substances Control Act Lead-Based Paint Renovation, Repair, and Painting Rule; SAN7527 Final Action Memo\_Refractory Products Manufacturing RTR 14Oct2021 SIGNED.pdf; SAN 7527 Refractories RTR Final Rule Preamble and Amendatory Rule Text\_admin.docx



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

October 13, 2021

OFFICE OF  
AIR AND RADIATION

**MEMORANDUM**

**SUBJECT:** Final Rule: National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations Residual Risk and Technology Review (RTR) and Flexible Polyurethane Foam Production and Fabrication Area Sources Technology Review (Tier 3; SAN 7526; RIN 2060-AU57) – **ACTION MEMORANDUM**

**FROM:** Joseph Goffman  
Acting Assistant Administrator (6101A)

**THRU:** Office of Policy (1803A)  
Office of Executive Secretariat (1105A)

**TO:** Michael S. Regan  
Administrator (1101A)

**PURPOSE**

Attached for your signature is a final rule addressing the residual risk and technology review (RTR) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Flexible Polyurethane Foam Fabrication Operations and the technology review for Flexible Polyurethane Foam Production and Fabrication Area Sources NESHAP. The NESHAP for the Flexible Polyurethane Foam Fabrication Operations was promulgated in 2003 and the required RTR, due within 8 years of promulgation, has not been completed. The NESHAP for the Flexible Polyurethane Foam Production and Fabrication Area Sources was promulgated in 2007 and the required technology review, due within 8 years of promulgation, has not been completed.

**DEADLINE**

The final rule for the Flexible Polyurethane Foam Fabrication Operations NESHAP RTR is subject to a court-ordered deadline of November 1, 2021. Although there is no court-ordered deadline for the Flexible Polyurethane Foam Production and Fabrication Area Sources NESHAP, we are past the 8-year Clean Air Act deadline for review and we wish to complete this review at the same time as the major source rule in order to provide certainty for the source category.

**OVERVIEW**

There are three major source facilities subject to the Flexible Polyurethane Foam Fabrication Operations NESHAP. The Flexible Polyurethane Foam Fabrication Operations source category is subcategorized into loop slitting and flame lamination. Total hazardous air pollutants (HAP)

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ED\_006372\_00000182-00001

content in adhesive use is regulated from loop slitters and HAP emissions are regulated from new flame laminators. The 2003 NESHAP did not set standards for existing sources of flame lamination.

There are 32 area source facilities subject to the Flexible Polyurethane Foam Production and Fabrication Area Sources NESHAP. The Flexible Polyurethane Foam Production and Fabrication Area Source NESHAP covers two often collocated source categories, Foam Production and Foam Fabrication. The area source standards regulate methylene chloride emissions from: slabstock polyurethane foam production; molded polyurethane foam production; rebond foam production; and foam fabrication adhesive use. Methylene chloride is no longer used within the source categories and has not been used since the initial standards were developed.

This final action makes minor changes to the proposed amendments based on information considered during the comment period, clarifying that the emission limit established in this final rule for existing flame lamination sources applies to each flame lamination line at affected facilities.

*Risk Review.* For the risk review of the major source standards, we assessed the remaining risks due to emissions of HAP from existing facilities subject to the Flexible Polyurethane Foam Fabrication Operations NESHAP. The only remaining HAP known to be emitted in this source category is hydrogen chloride (HCl), which is not a carcinogen. Therefore, there are no cancer risks based on source category emissions. We estimated maximum chronic noncancer risks and maximum acute noncancer risks to be acceptable. Additionally, there are no estimated adverse environmental effects.

*Technology Review.* For the technology review, we evaluated developments in practices, processes, and control technologies for both NESHAP to assess whether any further significant and cost-effective reduction in emissions could be achieved. We identified one cost-effective advance for the major source standards. That current industry practice, now being codified as a requirement, will prevent backsliding, but it is not expected to yield any reductions in emissions. Accordingly, the Environmental Protection Agency (EPA) is amending the definition of “HAP-based adhesive” so that major source new and existing loop slitters are prohibited from using adhesives containing 1 percent or more by weight of total HAP. We did not identify any cost-effective advances in emission control technologies for the area source standards.

*RTR Conclusions.* We conclude that the risk levels for this source category are acceptable and the existing standards protect health with an ample margin of safety. We are revising the definition of HAP-based adhesive in the major source NESHAP as part of the technology review.

*Startup, Shutdown and Malfunction (SSM).* We also reviewed the impact of the D.C. Circuit Court’s 2008 vacatur of the SSM provisions in the EPA’s NESHAP regulations. In this final rule, we are removing exemptions for periods of SSM. Discussions with industry to date have not identified any potential issues regarding compliance during these periods.

*Additional Actions.* We identified existing flame laminators as an unregulated emission source. Therefore, this final rule establishes a numeric limit of 1.45 lb/hr for HCl emissions. We are requiring that existing and new flame laminators conduct periodic performance testing (initially and then no less frequently than every 5 years). We are also adding electronic reporting requirements consistent with requirements of similar NESHAP.

## **ANTICIPATED PUBLIC AND STAKEHOLDER RESPONSE**

We expect that industry will be supportive of this final rule. We do not anticipate adverse response from environmental groups or other stakeholders regarding the amendments, as the amendments enhance recordkeeping requirements and establish an emission limit for the previously unregulated existing flame lamination lines.

## **INTERNAL DEVELOPMENT AND REVIEW PROCESS**

This final rule was developed under the Tier 3 rulemaking process and coordinated with OECA, OGC, OP and ORD. All internal comments have been considered and changes, where appropriate, have been incorporated. OGC concurred with this rule on August 27, 2021.

## **INTERAGENCY REVIEW**

Under Executive Order 12866, OMB determined this final rule to be a “non-significant” regulatory action, and, therefore, it did not undergo interagency review.

## **IMPACTS**

The costs associated with the final rule are attributed in part to performance testing of flame lamination lines (nonlabor cost) and in part to recordkeeping and reporting labor costs. We estimate that nationwide costs in the first year will be \$49,400 and that the nationwide average annual cost of the final rule will be \$21,600 over the first 3 years. These costs include reviewing the revised rule, performance testing, and record systems adjustments. We revised our estimate based on information considered during the comment period, such that a performance test will be conducted for each flame lamination line (four total, among two major source facilities) and will likely be contracted out by the facilities.

To examine the potential for any environmental justice issues that might be associated with the major source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 kilometers (km) and within 50 km of the facilities. The results of the demographic analysis for the major source category indicate that the minority population (being the total population minus the white population) is only slightly higher within 5 km of the three facilities than the national percentage (40 percent versus 38 percent).

## **STAKEHOLDER INVOLVEMENT**

During the development of this rule, the EPA communicated extensively with the Polyurethane Foam Association, which is the primary trade association for the flexible polyurethane foam fabrication and production industries. We discussed the scope of the action, data, and control technologies and related issues, and we considered industry’s input in our analyses. We also considered options to control unregulated emissions, and we established emission standards for existing sources of flame lamination using test data provided by one of the affected facilities.

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**PEER REVIEW**

There were no influential or highly influential products supporting this action as defined by the Agency's Peer Review Handbook.

**RECOMMENDATION**

OAR recommends that you sign the attached final rule for publication in the *Federal Register*.

Attachment

Internal Document Only – Do Not Cite, Quote, or Release

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 63**

**[EPA-HQ-OAR-2020-0572; FRL-7526-03-OAR]**

**RIN 2060-AU57**

**National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations Residual Risk and Technology Review and Flexible Polyurethane Foam Production and Fabrication Area Source Technology Review**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** This action finalizes the residual risk and technology review (RTR) conducted for the Flexible Polyurethane Foam Fabrication Operations source category regulated under national emission standards for hazardous air pollutants (NESHAP). This action also finalizes the NESHAP technology review for two area source categories, Flexible Polyurethane Foam Production and Flexible Polyurethane Foam Fabrication, which are combined in one subpart. In this action, the EPA is finalizing the proposed revisions to the Flexible Polyurethane Foam Fabrication Operations major source NESHAP, which include adding a numeric emission limit for existing flame lamination units, removing exemptions for periods of startup, shutdown, and malfunction (SSM) and specifying that the emissions standards always apply, requiring periodic performance tests, and requiring electronic reporting of performance test results and compliance reports. In this action, the EPA is also finalizing the proposed revisions to the NESHAP for Flexible Polyurethane Foam Production and Flexible Polyurethane Foam Fabrication area



sources to remove references to the provisions of another NESHAP that has been revised and no longer contains the referenced provisions. Implementation of these final rules is not expected to result in significant changes to the hazardous air pollutant (HAP) emissions from affected facilities in these three source categories or to human health impacts or environmental impacts associated with those emissions. However, this action will result in improved monitoring, compliance, and implementation of the existing standards and codifies existing industry practices to prevent backsliding.

**DATES:** This final rule is effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** The U.S. Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA-HQ-OAR-2020-0572. All documents in the docket are listed on the <https://www.regulations.gov/> website. Although listed, some information is not publicly available, *e.g.*, Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through <https://www.regulations.gov/>. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room was closed to public visitors on March 31, 2020, to reduce the risk of transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform. There is a temporary suspension of mail delivery to the EPA, and no hand deliveries are currently accepted. For further information and updates on EPA Docket Center services and the current status, please visit us online at <https://www.epa.gov/dockets>.

**FOR FURTHER INFORMATION CONTACT:** For questions about this final action, contact Ms. Lisa Sutton, Sector Policies and Programs Division (D243-04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-3450; fax number: (919) 541-4991; and email address: [sutton.lisa@epa.gov](mailto:sutton.lisa@epa.gov). For specific information regarding the risk modeling methodology, contact Mr. Chris Sarsony, Health and Environmental Impacts Division (C539-02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-4843; fax number: (919) 541-0840; and email address: [sarsony.chris@epa.gov](mailto:sarsony.chris@epa.gov).

**SUPPLEMENTARY INFORMATION:**

*Preamble acronyms and abbreviations.* The Agency uses multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

CAA	Clean Air Act
CDX	Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting
CFR	Code of Federal Regulations
CRA	Congressional Review Act
EPA	Environmental Protection Agency
ERT	Electronic Reporting Tool
GACT	generally available control technology
HAP	hazardous air pollutants(s)
HCl	hydrochloric acid
HQ	hazard quotient
HQREL	hazard quotient reference exposure level
ICR	Information Collection Request
km	kilometer
MACT	maximum achievable control technology
MIR	maximum individual risk
NAICS	North American Industry Classification System
NESHAP	national emission standards for hazardous air pollutants
NTTAA	National Technology Transfer and Advancement Act
OAQPS	Office of Air Quality Planning and Standards

OMB	Office of Management and Budget
OSHA	Occupational Safety and Health Administration
PB-HAP	hazardous air pollutants known to be persistent and bio-accumulative in the environment
RATA	relative accuracy test audit
REL	reference exposure level
RFA	Regulatory Flexibility Act
RIA	Regulatory Impact Analysis
RIN	Regulatory Information Number
RTR	risk and technology review
SSM	startup, shutdown, and malfunction
UMRA	Unfunded Mandates Reform Act
TOSHI	target organ-specific hazard index
tpy	tons per year
UPL	upper prediction limit
XML	extensible markup language

Throughout this document, wherever “we,” “us,” or “our” is used, we mean the EPA.

*Background information.* On January 11, 2021, the EPA proposed revisions to the major source Flexible Polyurethane Foam Fabrication Operations NESHAP based on our RTR and to the NESHAP for Flexible Polyurethane Foam Production and Fabrication area sources based on our technology review. In this action, we are finalizing decisions and revisions for the rules. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposal and the EPA’s responses to those comments is available in *Summary of Public Comments and Responses on the Proposed Rule for the Major Source Flexible Polyurethane Foam Fabrication NESHAP and the NESHAP for Flexible Polyurethane Foam Production and Fabrication Area Sources* (86 FR 1868, January 11, 2021), Docket ID No. EPA-HQ-OAR-2020-0572. A “track changes” version of the regulatory language that incorporates the changes in this action is available in the docket.

*Organization of this document.* The information in this preamble is organized as follows:

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## **I. General Information**

### *A. Does this action apply to me?*

The source categories that are the subject of this final action are the Flexible Polyurethane Foam Fabrication Operations major source category regulated under 40 CFR part 63, subpart M, and the Flexible Polyurethane Foam Production and Flexible Polyurethane Foam Fabrication area source categories, regulated under 40 CFR part 63, subpart O. The North American Industry Classification System (NAICS) code for fabricators of flexible polyurethane foam is 326150, “Urethane and Other Foam Product (except Polystyrene) Manufacturing.” This list of categories and NAICS codes is not intended to be exhaustive but rather provides a guide for readers regarding the entities that this final action is likely to affect. The final standards will be directly applicable to the affected sources. Federal, state, local, and tribal government entities would not be affected by this action.

The Flexible Polyurethane Foam Fabrication Operations major source category was added to the EPA’s HAP source category list in 1996. (61 FR 28197, June 4, 1996.) The NESHAP for that major source category, 40 CFR part 63, subpart M, was promulgated in 2003. (68 FR 18062, April 14, 2003.) The Flexible Polyurethane Foam Fabrication area source

category was added to the EPA's HAP source category list in 1999. (64 FR 38706, July 19, 1999.) The Flexible Polyurethane Foam Production area source category was added to the EPA's HAP source category list in 2002. (67 FR 70427, November 22, 2002.) The Flexible Polyurethane Foam Production major source category, Part 63, subpart III, was included on the EPA's initial HAP source category list. (57 FR 31576, July 16, 1992.) The maximum achievable control technology (MACT) standards for subpart III were initially promulgated in 1998. (63 FR 53980, October 7, 1998.) The EPA established one area source NESHAP at 40 CFR part 63, subpart OOOOOO, that applies to the two area source categories due to the similarity of their operations and because they are often collocated. (72 FR 38864, July 16, 2007.)

The Flexible Polyurethane Foam Fabrication Operations major source category and the Flexible Polyurethane Foam Fabrication area source category include facilities engaged in cutting, gluing, and/or laminating pieces of flexible polyurethane foam. These source categories include fabrication operations that are collocated with foam production plants as well as those located offsite from foam production plants. Emissions from foam fabrication primarily result from the lamination of polyurethane foam to adhere foam to other substrates and from the use of HAP-based adhesives in the gluing process. The Flexible Polyurethane Foam Production area source category includes facilities that manufacture foam made from a polymer containing a plurality of carbamate linkages in the chain backbone (polyurethane). Polyurethane is commonly made by reacting a polyisocyanate with an organic polyhydroxyl material in the presence of water. Application of blowing agents, catalysts, surfactants, and fillers transform the polyurethane into a foam with specialized properties.

This final action addresses the major source NESHAP that applies to the Flexible Polyurethane Foam Fabrication Operations major source category and addresses the area source

NESHAP that applies to the Flexible Polyurethane Foam Production area source category and the Flexible Polyurethane Foam Fabrication area source category. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

*B. Where can I get a copy of this document and other related information?*

In addition to being available in the docket, an electronic copy of this final action will also be available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: <https://www.epa.gov/stationary-sources-air-pollution/flexible-polyurethane-foam-fabrication-operations-national-emission>. Following publication in the *Federal Register*, the EPA will post the *Federal Register* version and key technical documents at this same website.

Additional information is available on the RTR website at <https://www.epa.gov/stationary-sources-air-pollution/risk-and-technology-review-national-emissions-standards-hazardous>. This information includes an overview of the RTR program and links to project websites for the RTR source categories.

*C. Judicial Review and Administrative Reconsideration*

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, WJC South Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

## **II. Background**

### *A. What is the statutory authority for this action?*

The statutory authority for this action is provided by sections 112 and 301 of the CAA, as amended (42 U.S.C. 7401 *et seq.*). Section 112 of the CAA establishes a two-stage regulatory process to address emissions of hazardous air pollutants (HAP) from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. “Major sources” are those that emit, or have the potential to emit, any single HAP at a rate of 10 tons per year (tpy) or more, or 25 tpy or more of any combination of HAP. All other sources are “area sources.” For major sources, these standards are commonly referred to as maximum achievable



control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems, or techniques, including, but not limited to, those that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials, or other modifications; enclose systems or processes to eliminate emissions; collect, capture, or treat HAP when released from a process, stack, storage, or fugitive emissions point; are design, equipment, work practice, or operational standards; or any combination of the above.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements, and which may not be based on cost considerations. See CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements. For area sources, CAA section 112(d)(5) gives the EPA discretion to set standards based on generally available control technologies or management practices (GACT standards) in lieu of MACT standards.

In the second stage of the NESHAP regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, which is applicable to both MACT and GACT standards, we must review the technology-based standards and revise them “as necessary (taking into account developments in practices, processes, and control technologies)” no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, which is limited to the MACT standards, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).<sup>1</sup> For more information on the statutory authority for this rule, see the proposal preamble (86 FR 1868, January 11, 2021) and the memorandum, *CAA Section 112 Risk and Technology Reviews: Statutory Authority and Methodology*, December 14, 2017, available in the docket for this action (Document ID EPA-HQ-OAR-2020-0572-0016).

*B. What are the source categories and how do the current NESHAPs regulate their HAP emissions?*

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<sup>1</sup> The court has affirmed this approach of implementing CAA section 112(f)(2)(A): *NRDC v. EPA*, 529 F.3d 1077, 1083 (D.C. Cir. 2008) (“If EPA determines that the existing technology-based standards provide an ‘ample margin of safety,’ then the Agency is free to readopt those standards during the residual risk rulemaking.”).

The EPA promulgated MACT standards for major source Flexible Polyurethane Foam Fabrication Operations facilities in 2003 under 40 CFR part 63, subpart M. The standards apply to major sources of HAP at existing and new flexible polyurethane foam fabrication facilities. Because of their potential to generate HAP emissions, the processing units of interest at foam fabrication facilities are loop slitters and flame lamination units. The 2003 MACT standards for Flexible Polyurethane Foam Fabrication Operations require HAP emissions reductions and control for new flame lamination units and prohibit use of HAP-based adhesives in new and existing loop slitting operations. For new flame lamination units, a 90 percent reduction in HAP emissions is required. For existing flame lamination units, the 2003 rule had no MACT emission limits. For new and existing loop slitters, the 2003 MACT standards prohibited use of any adhesive containing 5 percent or more (by weight) of total HAP. The EPA estimates that there are currently three facilities subject to subpart M.

In 2007, the EPA promulgated GACT standards for the Flexible Polyurethane Foam Production area source category and the Flexible Polyurethane Foam Fabrication area source category together under 40 CFR part 63, subpart O. The GACT standards required that methylene chloride be significantly reduced or eliminated from slabstock foam production, molded foam release agents, equipment cleaning, rebond foam mold release agents, and foam fabrication adhesive use. Although both area source categories were listed for regulation due to emissions of the urban HAP methylene chloride, the EPA finds that methylene chloride is no longer used within either source category. The Flexible Polyurethane Foam Production area source category includes facilities that manufacture foam made from polyurethanes, which are in the class of compounds called “reaction polymers.”

There are three types of polyurethane foam production facilities: Slabstock flexible polyurethane foam (slabstock foam), molded flexible polyurethane foam (molded foam), and rebond foam. Slabstock foam is produced in large continuous buns that are then cut in the desired size and shape. Molded foam is produced by “shooting” the foam mixture into a mold of the desired shape and size. Rebond foam is made from scrap foam that is converted into a material primarily used for carpet underlay. The EPA estimates that there are 32 facilities currently subject to the area source standards, of which approximately 20 are believed to be owned by small businesses.

For both the Flexible Polyurethane Foam Operations major source category and the Flexible Polyurethane Foam Fabrication area source category, operations involve cutting, bonding, and/or laminating pieces of flexible polyurethane foam together or to other substrates. Typical bonding techniques include gluing, taping, and flame lamination.

Both the Flexible Polyurethane Foam Production and Flexible Polyurethane Fabrication Operations area source categories were listed for regulation due to emissions of the urban HAP methylene chloride. At the time of the initial area source standards promulgation, methylene chloride was the only urban HAP used at foam production and foam fabrication facilities. Now, however, there are no known urban HAP used at foam production and foam fabrication facilities. In the past, slabstock foam production facilities sometimes used methylene chloride as an auxiliary blowing agent to control the density and other properties of the foam as it expanded during the pouring process. Methylene chloride was also sometimes used as an equipment cleaner, in particular for mix heads. A small number of molded and rebond foam facilities used methylene chloride in mold release agents, and some molded foam facilities used it as a mixhead cleaner. Foam fabricators used

methylene chloride-based adhesives to adhere pieces of foam to one another. Flame laminators have never used methylene chloride and, as such, are not regulated by the area source standards.

*C. What changes did we propose for flexible polyurethane foam fabrication operations for major sources and flexible polyurethane foam production and fabrication area sources in our January 11, 2021, proposal?*

On January 11, 2021, the EPA published a proposed rule in the *Federal Register* (86 FR 1868) for the Flexible Polyurethane Foam Fabrication Operations NESHAP for major sources, 40 CFR part 63, subpart M, and the NESHAP for Flexible Polyurethane Foam Production and Flexible Polyurethane Foam Fabrication Area Sources, 40 CFR part 63, subpart O, that took into consideration the RTR analyses for major sources and the technology review for area sources.

For the major source Flexible Polyurethane Foam Fabrication Operations NESHAP, we proposed that the health risks due to HAP emissions from the source category are acceptable, that the NESHAP provides an ample margin of safety to protect public health and that additional standards are not necessary to prevent an adverse environmental effect. To address emissions sources that do not have an emissions limit in the existing NESHAP, we proposed a numeric limit for HCl emissions from existing flame laminators under CAA section 112(d)(2) and (3). As a result of the technology review, we proposed to lower the amount of HAP that could be contained in an adhesive for that material to be considered a HAP-based adhesive. For this change, the definition of “HAP-based adhesive” was revised from adhesive with a HAP weight of 5 percent or more to adhesive with a HAP weight of 1 percent or more. In addition, we proposed to amend the NESHAP to list specific carcinogenic HAP that must be included in the

adhesive HAP content calculation, rather than including references to other rules where these HAP were previously but are no longer listed. We also proposed revisions to the SSM provisions of this NESHAP to ensure it is consistent with the court decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008). Finally, we proposed revisions to the recordkeeping and reporting requirements of the NESHAP to require the use of electronic reporting of performance test reports and semiannual reports and to require initial and periodic performance testing (every 5 years) for flame lamination units.

For the NESHAP for Flexible Polyurethane Foam Production and Flexible Polyurethane Foam Fabrication Area Sources, we proposed that no revisions to the NESHAP are necessary based on our technology review. Where subpart OOOOOO references the NESHAP for flexible polyurethane foam production major sources (40 CFR part 63, subpart III), we proposed to make conforming changes to reflect amendments made to subpart III. For additional information regarding the proposed rule, see the January 11, 2021, proposal (86 FR 1868).

### **III. What is included in these final rules?**

This action finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for the Flexible Polyurethane Foam Fabrication Operations major source category and the CAA technology review provisions for the Flexible Polyurethane Foam Production and Fabrication area source categories. This action amends the Flexible Polyurethane Foam Fabrication Operations major source NESHAP and the NESHAP for the Flexible Polyurethane Foam Production and Fabrication area source categories based on those determinations. This action also finalizes other changes to the Flexible Polyurethane Foam Fabrication Operations major source NESHAP, including the proposed addition of a numeric emissions limit for existing flame lamination units under the authority of CAA section 112(d)(2) and (3), revisions to the

SSM requirements, addition of electronic reporting requirements, and editorial corrections. For the Flexible Polyurethane Foam Production and Fabrication area sources NESHAP, this action finalizes the proposed revisions to the rule to eliminate references to another NESHAP (Subpart III, National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production) that has been revised and no longer contains the referenced provisions.

*A. What are the final rule amendments based on the risk review for the major source Flexible Polyurethane Foam Fabrication Operations source category?*

The EPA proposed no changes to the Flexible Polyurethane Foam Fabrication Operations major source NESHAP based on the risk review conducted pursuant to CAA section 112(f). In this action, we are finalizing our proposed determination that risks from the Flexible Polyurethane Foam Fabrication Operations major source category are acceptable, the standards provide an ample margin of safety to protect public health, and more stringent standards are not necessary to prevent an adverse environmental effect. The EPA received no new data or other information during the public comment period that causes us to change that proposed determination. Therefore, we are not making any revisions to the existing standards under CAA section 112(f), and we are readopting the existing standards. Further information regarding these decisions is provided in section IV of this preamble.

*B. What are the final rule amendments based on the technology reviews for the major source Flexible Polyurethane Foam Fabrication Operations source category and the Flexible Polyurethane Foam Production and Fabrication area source categories?*

We determined that there are developments in practices, processes, and control technologies that warrant revisions to the MACT standards for the major source Flexible Polyurethane Foam Fabrication Operations source category. Therefore, to satisfy the

requirements of CAA section 112(d)(6), consistent with the proposal, we are revising the MACT standards to include a revised definition of HAP-based adhesive. The analyses and rationale for these decisions are described in section IV.B of this preamble. As part of the technology review, we also identified a regulatory gap (a previously unregulated process) and are establishing a new standard to fill that gap as described in section III.C of this preamble.

*C. What are the final rule amendments pursuant to section 112(d)(2) and (3) for the major source Flexible Polyurethane Foam Fabrication Operations source category?*

During the technology review, we identified existing flame laminators as an unregulated process in the major source category. For major sources, the EPA is required to set technology-based standards for sources of HAP emissions that reflect the maximum reductions of HAP emissions achievable (after considering cost, energy requirements, and non-air health and environmental impacts). However, these standards must be no less stringent than the average emission performance of the best performing five sources for a source category with fewer than 30 sources, as is the case here. Therefore, to satisfy the requirements of CAA section 112(d)(2) and (3), consistent with the proposal, we are revising the major source Flexible Polyurethane Foam Fabrication Operations NESHAP to include a MACT standard for existing source flame laminators. The analyses and rationale for this standard are described in section IV.C of this preamble.

*D. What are the final rule amendments addressing emissions during periods of startup, shutdown, and malfunction?*

We are finalizing the proposed amendments to the major source Flexible Polyurethane Foam Fabrication Operations NESHAP to remove and revise provisions related to SSM. In its 2008 decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), the court vacated portions



of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and (h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously. Previously, the 2003 Flexible Polyurethane Foam Fabrication Operations NESHAP included exemptions for standards during SSM. As explained in section IV.E of the January 2021 proposal preamble (86 FR 1868 at 1885, January 11, 2021), the EPA proposed that the Flexible Polyurethane Foam Fabrication Operations NESHAP would require that the standards always apply, consistent with the court decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008).

Table 7 to subpart M of 40 CFR part 63 (General Provisions applicability table) is being revised to change the specification of the requirements that apply during periods of SSM. We eliminated or revised certain recordkeeping and reporting requirements related to the eliminated SSM exemptions. The EPA also made other harmonizing changes to remove or modify inappropriate, unnecessary, or redundant language in the absence of the SSM exemptions. We proposed to remove the SSM exemptions such that the standards always apply because we determined that facilities in this source category can always meet the applicable emission standards in the NESHAP, including periods of startup and shutdown, without additional standards or work practices. We received no information to cause us to change our conclusion; therefore, the EPA is finalizing the removal of the SSM exemptions and is requiring that the standards always apply. The legal rationale and detailed changes for startup and shutdown periods that we are finalizing here are set forth in the January 11, 2021, preamble to the proposed rule. See 86 FR 1868 at 1885 and 1886.

Further, as proposed, the EPA is not including standards for malfunctions. As discussed in the proposal preamble, the EPA interprets CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards, although the EPA has the discretion to set standards for malfunctions where feasible. See 86 FR 1868 at 1885 and 1886.

*E. What other changes have been made to the NESHAP?*

The EPA is requiring owners or operators of flexible polyurethane foam fabrication operations major sources to submit electronic copies of certain required performance test reports, performance evaluation reports, and semiannual reports through the EPA's Central Data Exchange using the Compliance and Emissions Data Reporting Interface (CEDRI). The final rule requires that performance test results and performance evaluation results be submitted using the Electronic Reporting Tool. For semiannual reports, the final rule requires that owners or operators use the appropriate spreadsheet template to submit information to CEDRI. The final version of the templates for these reports are located on the CEDRI website.<sup>2</sup>

The electronic submittal of the reports addressed in this rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability and transparency, will further assist in the protection of public health and the environment, will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance, and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting also eliminates paper-based, manual processes, thereby saving time and resources,

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<sup>2</sup> See <https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>.

simplifying data entry, eliminating redundancies, minimizing data reporting errors, and providing data quickly and accurately to the affected facilities, air agencies, the EPA, and the public. For a more thorough discussion of electronic reporting, see the memorandum, *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, available in the docket for this action (Document ID EPA-HQ-OAR-2020-0572-0012).

*F. What are the effective and compliance dates of the standards?*

The revisions to the MACT standards being promulgated in this action are effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

Affected sources that commenced construction or reconstruction on or before January 11, 2021, must comply with all amendments, except for the electronic format for submitting compliance reports, no later than 180 days after the effective date of the final rule, or upon startup, whichever is later. Affected sources that commence construction or reconstruction after January 11, 2021, must comply with all requirements of the subpart, including the amendments being finalized, except for the electronic format for submitting compliance reports, no later than the effective date of the final rule or upon startup, whichever is later. All affected sources must comply with the electronic compliance report requirements no later than either 180 days after the effective date of the final rule or once the report template for this subpart has been available on the CEDRI website for 1 year, whichever date is later. All affected facilities must continue to meet the current requirements of 40 CFR part 63, subpart M, until the applicable compliance date of the amended rule.

This final action is not a “major rule” as defined by 5 U.S.C. 804(2), so the effective date of the final rule is the promulgation date as specified in CAA section 112(d)(10). For existing

sources, we are finalizing four changes that would impact ongoing compliance requirements for 40 CFR part 63, subpart M. As discussed elsewhere in this preamble, we are adding a numeric limit for HCl emissions from existing flame laminators. We are also adding a requirement that notifications, performance test results, and compliance reports be submitted electronically. Our experience with similar industries that are required to convert reporting mechanisms to install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test these new electronic submission capabilities, and reliably employ electronic reporting shows that a period of a minimum of 90 days, and, more typically, 180 days, is generally necessary to accomplish these revisions. For the final SSM revisions, we recognize that there are no facilities that are currently using the SSM provisions for new flame laminators, since there have not been any new sources since the standard was promulgated. As a result, we understand that no additional time is needed for compliance with the revised SSM provisions. Prior to proposal, we consulted with the regulated industry regarding the proposed limits for existing flame laminators and the requirement to conduct performance testing to demonstrate initial compliance within 180 days of the publication of the final rule and no less than every 5 years thereafter, to better understand the likely implications of the proposed revisions. Representatives of the company that owns the two impacted facilities indicated that performance testing could be done within the 180-day time frame for compliance. For the flame lamination unit existing sources that would be subject to the newly established emission limit, we understand that the facilities are able to meet the limit without add-on controls. However, we do recognize that facilities need time to conduct performance tests and demonstrate compliance with the emission limit.

To reduce the complication that different compliance dates for individual requirements would create and the additional burden such an assortment of dates would impose, considering our assessment of the timeframe needed for compliance with the entirety of the revised requirements, the EPA is finalizing a period of 180 days after the regulation's effective date within which all affected sources that commenced construction or reconstruction on or before January 11, 2021, must be in compliance with the regulation's revised requirements, with the exception of the electronic reporting requirements.

**IV. What is the rationale for our final decisions and amendments for the major source Flexible Polyurethane Foam Fabrication Operations source category and the Flexible Polyurethane Foam Production and Fabrication area source categories?**

For each issue, this section provides a description of what we proposed and what we are finalizing for the issue, the EPA's rationale for the final decisions and amendments, and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document available in the docket.

*A. Residual Risk Review for the Major Source Flexible Polyurethane Foam Fabrication Operations Source Category*

1. What did we propose pursuant to CAA section 112(f) for the major source Flexible Polyurethane Foam Fabrication Operations source category?

We proposed that the health risks due to emissions of HAP from the major source Flexible Polyurethane Foam Fabrication Operations source category are acceptable and that the NESHA provides an ample margin of safety to protect public health and that no additional standards are necessary to prevent an adverse environmental effect. Table 1 of this preamble

provides a summary of the results of the inhalation risk assessment for the source category. More detailed information on the risk assessment can be found in the *Residual Risk Assessment for the Flexible Polyurethane Foam Fabrication Source Category in Support of the 2021 Risk and Technology Review Final Rule* in the docket for this action.

**Table 1—Flexible Polyurethane Foam Fabrication Source Category Inhalation Risk Assessment Results**

Risk Assessment	Maximum Individual Cancer Risk (in 1 million)		Estimated Population at Increased Risk of Cancer $\geq$ 1-in-1 Million		Estimated Annual Cancer Incidence (cases per year)		Maximum Chronic Noncancer TOSHI <sup>3</sup>		Maximum Screening Acute Noncancer HQ <sup>4</sup>
	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions	Based on Allowable Emissions	Based on Actual Emissions
Source Category	0	0	0	0	0	0	0.002	0.002	HQREL = <1
Whole Facility	0.1	-	0	-	0.00001	-	0.2	-	-

The results of the inhalation risk assessment using actual emissions data, as shown in Table 1 of this preamble, indicate that no carcinogens are emitted by this category. Therefore, the cancer MIR based on actual emissions (lifetime) is zero and the total estimated annual cancer incidence (national) from these facilities based on actual emission levels is zero excess cancer cases per year. The maximum chronic noncancer target organ-specific hazard index (TOSHI) value based on actual emissions is 0.002 driven by HCl. The maximum screening acute

<sup>3</sup> The TOSHI is the sum of the chronic noncancer HQ for substances that affect the same target organ or organ system.

<sup>4</sup> The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop HQ values.

noncancer HQREL value (off-facility site) is 0.003 driven by HCl. No persistent and bio-accumulative HAP (PB-HAP) are emitted from the Flexible Polyurethane Foam Fabrication Operations source category, therefore, a multipathway assessment was not conducted. A screening-level evaluation of the potential adverse environmental risk associated with emissions of HCl indicated that no ecological benchmarks were exceeded.

As shown in Table 1, the maximum facility-wide cancer MIR is 0.1-in-1 million, driven by 2,4/2,6-toluene diisocyanate mixture (TDI) emissions from a vertical non-category point source and a non-category fugitive point source. The total estimated cancer incidence from the whole facility is 0.00001 excess cancer cases per year, or one excess case in every 100,000 years. The maximum facility-wide TOSHI for the source category is estimated to be 0.2, mainly driven by 2,4/2,6-TDI emissions from a vertical non-category point source and a non-category fugitive point source. Considering all the health risk information and factors discussed above, the EPA proposed that the risks are acceptable.

No carcinogens are emitted by the Flexible Polyurethane Foam Fabrication Operations source category. Therefore, there are no individuals in the exposed population with lifetime cancer risks above 1-in-1 million as a result of actual or allowable emissions from this category. In addition, the maximum chronic noncancer TOSHI value based on actual and allowable emissions is well below 1 (0.002 and 0.2, respectively) and the maximum screening acute noncancer HQ value (off-facility site) is also well below 1 (0.003). Therefore, the EPA proposed that additional emissions controls for flexible polyurethane foam fabrication operations facilities are not necessary to provide an ample margin of safety to protect public health. In addition, based on our screening-level evaluation of the potential for adverse environmental effects, we concluded that more stringent standards were not necessary to prevent an adverse environmental

effect. Considering all analyses, we did not propose any changes to the NESHAP based on the risk review. For more details regarding the risk review, see the proposal preamble (86 FR 1868 at 1876).

2. How did the risk review change for the major source Flexible Polyurethane Foam Fabrication Operations source category?

The EPA has not made any changes to either the risk assessments or our determinations regarding risk acceptability, ample margin of safety, or adverse environmental effects for the major source Flexible Polyurethane Foam Fabrication Operations source category since the proposal was published on January 11, 2021 (86 FR 1868). We are finalizing the risk review as proposed with no changes.

3. What key comments did we receive on the risk review, and what are our responses?

We received one comment in support of and one comment against the proposed residual risk review and our determination is that no revisions are warranted under CAA section 112(f)(2) for the source category. The comment in support of the determination noted that the residual risk review was reasonable and supported by the available data. The comment opposed to the determination was related to a concern that the EPA may not have included all HAP emitted from the source category, particularly from flame retardants. After review of these comments, and with no information from which to conclude that any HAP emissions are missing from the data or analyses performed, we determined that no changes are needed to the risk assessment. The comments and our specific responses can be found in the document, *Summary of Public Comments and Responses on the Proposed Rule for the Major Source Flexible Polyurethane Foam Fabrication NESHAP and the NESHAP for Flexible Polyurethane Foam Production and Fabrication Area Sources*, available in the docket for this rulemaking.



4. What is the rationale for our final approach and final decisions for the risk review?

As noted in our proposal, the EPA sets standards under CAA section 112(f)(2) using “a two-step standard-setting approach, with an analytical first step to determine an ‘acceptable risk’ that considers all health information, including risk estimation uncertainty, and includes a presumptive limit on MIR of approximately 1-in-10 thousand” (see 54 FR 38045, September 14, 1989). We weigh all health risk factors in our risk acceptability determination, including the cancer MIR, cancer incidence, the maximum chronic noncancer TOSHI, the maximum acute noncancer HQ, the extent of noncancer risks, the distribution of cancer and noncancer risks in the exposed population, and the risk estimation uncertainties.

In the second step of the approach, the EPA considers whether the emissions standards provide an ample margin of safety to protect public health “in consideration of all health information, including the number of persons at risk levels higher than approximately 1-in-1 million, as well as other relevant factors, including costs and economic impacts, technological feasibility, and other factors relevant to each particular decision.” *Id.*

For the Flexible Polyurethane Foam Fabrication Operations major source category, the risk analysis indicates that no carcinogens are emitted by the source category, and therefore, there is no cancer risk. In addition, the maximum chronic noncancer TOSHI value based on actual and allowable emissions is well below 1 and the maximum screening acute noncancer HQ value (off-facility site) is also well below 1. In addition, the screening-level evaluation of the potential for adverse environmental effects indicated that that no ecological benchmarks were exceeded.

We evaluated all comments on the risk review and determined that no changes to the review are needed. For the reasons explained in the proposal, we determined that the risks from

the major source Flexible Polyurethane Foam Fabrication Operations source category are acceptable, the current standards provide an ample margin of safety to protect public health, and more stringent standards are not necessary to prevent an adverse environmental effect. Therefore, pursuant to CAA section 112(f)(2), we are finalizing our residual risk review as proposed and readopting the standards for the major source Flexible Polyurethane Foam Fabrication Operations source category.

*B. Technology Review for the Major Source Flexible Polyurethane Foam Fabrication Operations Source Category and the Flexible Polyurethane Foam Production and Fabrication Area Source Categories*

1. What did we propose pursuant to CAA section 112(d)(6) for the major source Flexible Polyurethane Foam Fabrication Operations Source Category and the Flexible Polyurethane Foam Production and Fabrication area source categories?

During the technology review, one development in a practice, process, or control technology was identified for loop slitter use in the Flexible Polyurethane Foam Fabrication Operations major source category. In addition, we identified existing flame laminators as an unregulated process in the major source category, and we proposed standards for those sources under CAA section 112(d)(2) and (3), as described in section IV.C of this preamble.

At the time of the development of the NESHAP, the EPA found that the foam fabrication industry had effectively discontinued the use of adhesives containing methylene chloride, which was the primary HAP in the adhesives used, and had switched to other adhesives that did not contain methylene chloride and contained only small amounts of other HAP. As a result, for both existing and new loop slitters, the definition of HAP-based adhesive included in the 2003 rule was an adhesive containing 5 percent (by weight) or greater of HAP. As part of the technology

review, we reviewed other air toxics MACT standards and noted that several other NESHAP, developed both before and after the major source Flexible Polyurethane Foam Fabrication Operations NESHAP, include a definition of non-HAP adhesive or coating (where the coating definition included adhesives) with a lower percentage of HAP content than that of the definition included in the Flexible Polyurethane Foam Fabrication Operations rule. Additionally, through review of information provided by industry, we found that the current adhesives used in loop slitting operations are less than 1-percent HAP content by total weight. Based on the current industry standards of adhesive usage containing less than 1-percent HAP and the definition for HAP-based adhesive from similar source categories regulating adhesives, we proposed to revise the definition of “HAP-based adhesive” to read: “an adhesive containing 1 percent (by weight) or more of HAP, according to EPA Method 311 (appendix A to 40 CFR part 63) or another approved alternative.”

We also proposed to amend 40 CFR 63.8802(a)(1)(i) and (a)(3)(i), which describe how to determine the mass fraction of HAP in each material used, to remove references to Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4). The references to 29 CFR 1910.1200(d)(4) were intended to specify which compounds must be included in calculating the total HAP content of a coating material if the compounds are present at 0.1-percent or greater by mass; however, 29 CFR 1910.1200(d)(4) has been amended and no longer readily defines which compounds are carcinogens. We proposed to replace these references to OSHA-defined carcinogens and 29 CFR 1910.1200(d)(4) with a list (in a proposed new Table 8 to 40 CFR part 63, subpart M) of those HAP that must be included in calculating total HAP content of a coating material if they are present at 0.1 percent or greater by mass. We proposed to include HAP in this table if they were categorized in the

EPA's *Prioritized Chronic Dose-Response Values for Screening Risk Assessments* (May 9, 2014), as a "human carcinogen," "probable human carcinogen," or "possible human carcinogen" according to *The Risk Assessment Guidelines of 1986* (EPA/600/8-87/045, August 1987),<sup>5</sup> or as "carcinogenic to humans," "likely to be carcinogenic to humans," or with "suggestive evidence of carcinogenic potential" according to the *Guidelines for Carcinogen Risk Assessment* (EPA/630/P-03/001F, March 2005).<sup>6</sup> Detailed information of the technology review can be found in the memorandum titled *Technology Review for the Flexible Polyurethane Foam Manufacturing Source Category*, which is available in the docket for this action (Document ID EPA-HQ-OAR-2020-0572-0003).

For the Flexible Polyurethane Foam Production and Flexible Polyurethane Foam Fabrication area source categories, we found the listed urban HAP methylene chloride is no longer used within either source category. Additionally, we did not find any advances in technologies during our review of the source categories. Detailed information of the technology review can be found in the memorandum titled *Technology Review for the Flexible Polyurethane Foam Production and Fabrication Area Source Categories*, which is available in the docket for this action (Document ID EPA-HQ-OAR-2020-0572-0004).

2. How did the technology review change for the major source Flexible Polyurethane Foam Fabrication Operations Source Category and the Flexible Polyurethane Foam Production and Fabrication area source categories?

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<sup>5</sup> See <https://www.epa.gov/fera/dose-response-assessment-assessing-health-risks-associated-exposure-hazardous-air-pollutants>.

<sup>6</sup> See <https://www.epa.gov/risk/guidelinescarcinogen-risk-assessment>.

The EPA has not made any changes to the technology review since the proposal was published on January 11, 2021. We are finalizing the technology review as proposed with no changes.

3. What key comments did we receive on the technology reviews, and what are our responses?

We received comments in support of the proposed technology reviews and the revisions we proposed to the definition of HAP-based adhesive resulting from the findings of the technology review. All commenters supported the proposed revision to the definition of HAP-based adhesive. One commenter noted that the proposed revision should not have an adverse impact on loop-slitting and that it is supported by the industry. Two commenters specifically supported this revision in its effect in limiting backsliding. After review of these comments, we determined that no changes are needed to the technology reviews or the proposed revised definition of HAP-based adhesive. The comments and our specific responses can be found in the document, *Summary of Public Comments and Responses on the Proposed Rule for the Major Source Flexible Polyurethane Foam Fabrication NESHAP and the NESHAP for Flexible Polyurethane Foam Production and Fabrication Area Sources*, available in the docket for this rulemaking.

4. What is the rationale for our final approach for the technology review?

We evaluated all comments on the technology reviews and determined that no changes to the reviews are needed. Commenters identified no developments in practices, processes, or control technologies advances in technologies to consider, beyond the technology-related development identified in the proposal (industry practice of using lower-HAP adhesive in loop-slitting operations). Therefore, pursuant to CAA section 112(d)(6), we are finalizing our technology reviews as proposed.

*C. Actions Taken Pursuant to CAA Sections 112(d)(2) and 112(d)(3)*

1. What did we propose for the major source Flexible Polyurethane Foam Fabrication Operations Source Category?

Pursuant to CAA section 112(d)(2) and (3), we proposed to establish a numeric limit in the Flexible Polyurethane Foam Fabrication Operations major source NESHAP for HCl emissions from existing flame laminators. Through the technology review, we identified these units as sources of HAP emissions that did not have MACT standards in the NESHAP. For the four existing source flame lamination units in the source category, HCl emissions data from only one of these units is available, and the proposed MACT floor was based on the HCl data for this unit. To determine the level of the MACT floor, the Upper Prediction Limit method was used to account for variability in flame laminator emissions performance, and the MACT floor was calculated at 1.45 pounds per hour of HCl.<sup>7</sup>

The EPA also evaluated whether a beyond-the-floor emissions limit would be appropriate; specifically, we evaluated whether the incremental emissions reduction achievable with a venturi scrubber would be cost effective. The venturi scrubber was the only control technology in use at flame lamination sources that was identified by the EPA with the initial promulgation of the NESHAP, and no other developments in control technologies were identified in the review of these standards. The EPA estimated that the average incremental cost per ton of HCl emissions reduced with this technology would be approximately \$26,000 and found that this would not be cost effective for the control of HCl. Therefore, we proposed that floor-level MACT controls are appropriate for existing flame laminators.

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<sup>7</sup> See *MACT Floor and Beyond-the-Floor Analysis for Existing Flame Laminators in the Flexible Polyurethane Foam Fabrication Source Category* (Document ID EPA-HQ-OAR-2020-0572-0002).

2. What changed since proposal?

In the final rule, we have made revisions in several sections to clarify that the flame lamination emission limit applies to each flame lamination line individually. As 40 CFR 63.8784(b)(2) states that the flame lamination affected source is the collection of all flame lamination lines, these revisions will make it clear that the limit is for each flame lamination line within an affected source rather than the collection of all flame lamination lines of an affected source.

For existing flame lamination units, we have also revised the final rule to include a more appropriate method of calculating the HCl emissions rate. In the proposed rule, we proposed to require existing sources to use the same method of calculating the HCl emissions rate as that required for new and reconstructed sources. However, while that method is appropriate for determining compliance with an emissions limit that requires a certain emissions percentage reduction using a control device, it is not appropriate for the existing source emissions limit that requires emissions to be below a specified numeric value, regardless of the use of a control device. Therefore, to correct this deficiency in the final rule, we have added an HCl calculation method that is appropriate to the emissions limit format and is based on the concentration of HCl and the volumetric flow rate of the flame lamination line's outlet gas stream to the atmosphere.

3. What are the key comments and what are our responses?

*Comment:* Several commenters support the establishment of emission standards for HCl emissions from existing flame lamination units; however, one commenter states that the proposed limits need to be strengthened. The commenter observes that there are four existing flame lamination units and that due to data availability, the EPA used data from only one of these to set the proposed MACT floor. The commenter states the EPA should have required the other

sources to provide the necessary data for analysis and that there is no indication that the one source for which the EPA has data represents the average emission limitation achieved by the best-performing sources. The commenter adds that the EPA used the upper prediction limit (UPL) approach, which moves the floor further from the average emissions limitation achieved by the best-performing sources. Due to these aspects of the proposed MACT floor, the commenter states that the EPA has not met the CAA requirements to set the limits at the maximum achievable degree.

The commenter also states that the EPA fails to meet the beyond-the-floor requirements by failing to assure the maximum achievable degree of emission limitation. According to the commenter, the EPA decided not to require additional reductions beyond the floor purely based on cost data from its analysis conducted for the proposal of the NESHAP in 2001. The commenter states that the EPA did not provide evidence to support its assumption that the cost effectiveness today would be similar to what it was in 2001 after adjusting for inflation and that the EPA provided no information to support its claim that nothing has substantially changed with the control technology of a venturi scrubber since that time. The commenter adds that the EPA did not consider the health benefits of the emissions reduction.

*Response:* In setting the MACT floor for these sources, we have used all data available to the Agency. As provided for by CAA section 112(d)(3)(B), this limit was set at the average emission limitation achieved by the best performing sources for which the Administrator has or could reasonably obtain emissions information. In this instance, one of the four flame lamination units in operation in the source category has been tested for HAP emissions. Therefore, this one emissions test, which represents performance of 25 percent of the flame lamination units in operation, represents the whole of the data available for these emissions sources and constitutes



the basis for the MACT floor. Based on the information above, the EPA determined that the emissions information on which the MACT floor is based is representative of the source category. While it may have been possible for the EPA to require the facilities to conduct further HAP emissions testing to use in setting the MACT floor, due to several factors (including the additional time this would have added to the rulemaking process, the availability of at least one emissions test, and the expected types and levels of emissions expected from these units), the EPA determined, consistent with the Agency's discretion under the CAA, not to require additional emissions testing to be performed. Additionally, we note that while the commenter is concerned that the emissions limit set using the available data for one source may not be as stringent as the average of the best performing sources in the source category, the Administrator is required to set standards based on available data.

We disagree with the commenter that use of the UPL moves the floor further from the average emission limitation achieved by the best performing sources. To develop the proposed HCl MACT standard for existing flame lamination units, the EPA used the UPL statistical methodology, which the EPA has used in many rulemakings and which was upheld by the D.C. Circuit Court in *U.S. Sugar Corp. v. EPA*, 830 F.3d 579 (D.C. Cir. 2016). That is, the best performers, and their level of performance, are determined after accounting for sources' normal operating variability. The UPL represents the value below which one can expect the mean of a specified number of future observations (e.g., 3-run average) to fall, for the specified level of confidence, based upon the results of an independent sample from the same population.

The UPL approach allows for the development of the average emissions value that the source is achieving, given that the MACT floor is derived from short-term emissions test data and such data are not representative of the range of operating conditions that the facility faces on

a day-to-day basis. In statistical terms, each test produces a limited data sample, not a complete enumeration of the available data for performance of the unit over a long period of time.

Therefore, the EPA needs to adjust the short-term data to account for these varying conditions to properly estimate the source's performance over time.

In calculating the UPL that we proposed as the MACT floor for existing flame lamination lines, we tested the dataset (three runs) for skewness and kurtosis to determine that the non-normal (lognormal) data distribution is the best representation of the sample set, and we used the UPL equation appropriate to that data distribution. Because the floor is based on the performance of a single unit, our evaluation of the data was limited to ensuring that the emission limit is a reasonable estimate of the performance of the unit based on our knowledge about the process and controls. The wide range in HCl emissions shown by the available data for this best-performing unit indicates that variability is significant, and we determined that the emission limit is representative of the actual performance of the unit upon which the limit is based, considering variability.

We note that after MACT standards are promulgated, we are required to review those standards periodically, and for such reviews, we typically have significant additional HAP emissions data from the intervening years of compliance with which to further assess the actual performance of the various emission sources. We anticipate that this will be the case for existing flame lamination lines.

As part of the technology review, a search for information on venturi scrubbers was undertaken and no new information on their performance or costs was found that would indicate that our previous cost analysis is not representative of current costs. No information was received during the comment period to suggest that these assumptions were incorrect.

We concluded in the residual risk assessment that risks from the source category are acceptable and that the standards provide an ample margin of safety. The addition of new MACT standards for HCl for existing sources will further reduce risks from the source category.

*Comment:* One commenter asserts that the EPA, in setting emission standards for uncontrolled HAP emissions for this source category, must include emission standards for 1-bromopropane (1-BP, also known as n-propyl bromide) as a “necessary” revision to satisfy its legal obligation in this rulemaking, citing *Louisiana Environmental Action Network v. EPA*, 955 F.3d 1088 (D.C. Cir. 2020) (*LEAN*). The commenter notes that the EPA has determined that 1-BP is an “air pollutant” that “may reasonably be anticipated to cause adverse effects to human health” and that it therefore qualifies as a HAP, and the commenter points out that the EPA, having granted 1-BP for listing as a HAP, has not yet completed that listing process.

Noting that at least one source reported using 1-BP, the commenter argues that the EPA should gather further information and ensure all sources meet emission standards for 1-BP that satisfy § 7412(d) and (f). The commenter cited a recent risk evaluation under TSCA, in which “EPA has determined that risk from emissions to the ambient air of 1-BP could be eliminated or reduced to a sufficient extent by actions taken under the CAA.” The commenter believes the EPA acted unlawfully and in an arbitrary manner by failing in this rulemaking to assess 1-BP emissions and propose emission standards for 1-BP.

*Response:* The EPA does not agree that the *LEAN* decision compels regulation of 1-BP for this sector, because that decision only goes to timing; the EPA must address any regulatory gaps (that is, any unregulated HAP emissions from the source category which the EPA is required to regulate) when it conducts a technology review for that category. For this source category, the EPA received information indicating that no major sources are using 1-BP and few

to no area sources may be using 1-BP in small quantities as an equipment cleaner. At this time, there is no requirement to set standards for 1-BP as part of the review for major sources in this category during the CAA section 112(d)(6) technology review because 1-BP is not emitted by any major sources in this source category. As for the area sources, the EPA need only review the standards set for the urban HAP for which this area source category was listed under CAA section 112(c)(3), which is methylene chloride. We are not obligated to set standards for other listed HAP that are emitted from this area source category.<sup>8</sup> *See Desert Citizens Against Pollution v. EPA*, 699 F.3d 524, 525–26 (D.C. Cir. 2012).

4. What is the rationale for our final approach for the actions taken pursuant to CAA sections 112(d)(2) and 112(d)(3)?

We evaluated all comments received regarding the proposed standard for existing flame lamination units and determined that no changes to the level of the standard are needed. We conclude that the standard, which is based on the UPL and emissions data from a single unit, represents the average emission limitation achieved by the best performing sources for which the Administrator has or could reasonably obtain emissions information. A more detailed explanation for this decision may be found in responses provided earlier in this document. Through further review of the proposed rule, we determined that clarifications are needed for the final rule language to ensure it is clear the flame lamination emissions limits apply to each individual flame lamination line, and we have revised the final rule accordingly. In addition, to correct a deficiency in the proposed rule's HCl emissions calculation method for existing source flame lamination units, we have added an appropriate calculation method in the final rule.

#### *D. Removal of the SSM Exemptions*

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<sup>8</sup> The EPA notes that while 1-BP is not yet a listed HAP, it soon will be.

1. What did we propose for the major source Flexible Polyurethane Foam Fabrication Operations NESHAP?

The EPA proposed amendments to the major source Flexible Polyurethane Foam Fabrication Operations NESHAP to remove the provisions related to SSM to ensure that they are consistent with the court decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008) that standards always apply. As detailed in the January 2021 proposal, we proposed to change the requirements for SSM by removing the exemption for new flame laminators from the requirements to meet the standard during SSM periods and by removing the requirement to develop and implement an SSM plan. The EPA proposed revisions to Table 7 of subpart MMMMM, The Applicability of General Provisions, to remove SSM exemptions and plan development for new flame lamination sources.

2. What changed since proposal?

We determined that no changes were necessary to the proposed revised requirements for SSM periods. Therefore, we are finalizing the revised provisions related to SSM periods as proposed (86 FR 1868 at 1885, January 11, 2021).

3. What are the key comments and what are our responses?

We received comments in support of the proposed revisions regarding SSM periods. Generally, commenters supported the proposed removal of the exemption for periods of SSM and the elimination of the requirement to develop an SSM plan, recognizing that these changes are consistent with court decisions requiring that the CAA standards always apply. After review of these comments, we determined that no changes are needed to the proposed revisions regarding SSM periods. The comments and our specific responses can be found in the document, *Summary of Public Comments and Responses on the Proposed Rule for the Major Source*

*Flexible Polyurethane Foam Fabrication NESHAP and the NESHAP for Flexible Polyurethane Foam Production and Fabrication Area Sources*, available in the docket for this rulemaking.

4. What is the rationale for our final approach for the SSM provisions?

We evaluated all comments on the EPA's proposed amendments to remove the SSM provisions. For the reasons explained in the proposed rule, we determined that the proposed removal of the SSM exemptions is required to be consistent with the 2008 court decision that standards always apply. Therefore, we are finalizing our approach for removing the SSM exemptions as proposed.

*E. Electronic Reporting*

1. What did we propose?

We proposed amendments to the major source Flexible Polyurethane Foam Fabrication Operations NESHAP to require owners or operators to submit electronic copies of initial notifications, notifications of compliance status, performance test reports, performance evaluation reports, and semiannual reports through the EPA's Central Data Exchange (CDX) using CEDRI. Additionally, we proposed two broad circumstances in which electronic reporting extensions may be provided at the discretion of the Administrator. The EPA proposed these extensions to protect owners or operators from noncompliance in cases where they are unable to successfully submit a report by the reporting deadline for reasons outside of their control, including CDX and CEDRI outages and *force majeure* events, such as acts of nature, war, or terrorism.

2. What changed since proposal?

We determined that no changes were necessary to the proposed requirements for owners or operators of flexible polyurethane foam fabrication operations major sources to submit initial

notifications, notifications of compliance status, performance test reports, performance evaluation reports, and semiannual reports electronically using CEDRI. Therefore, we are finalizing the electronic reporting provisions as proposed (86 FR 1886, January 11, 2021).

3. What are the key comments and what are our responses?

The EPA received one comment that generally supported the proposed amendment to require electronic reporting but was opposed to the *force majeure* provisions due to concern that those provision would allow for unreported exceedances to go unchecked. After review and consideration of this comment, we determined that no changes are needed to the electronic reporting requirements or their force majeure provisions. This comment and our specific response can be found in the document, *Summary of Public Comments and Responses on the Proposed Rule for the Major Source Flexible Polyurethane Foam Fabrication NESHAP and the NESHAP for Flexible Polyurethane Foam Production and Fabrication Area Sources*, available in the docket for this rulemaking.

4. What is the rationale for our final approach to electronic reporting?

We are finalizing as proposed a requirement in the major source NESHAP that owners or operators of flexible polyurethane foam fabrication operations submit electronic copies of notifications, performance evaluation reports, and semiannual compliance reports using CEDRI. We also are finalizing, as proposed, provisions that allow facility owners or operators a process to request extensions for submitting electronic reports for circumstances beyond the control of the facility (*i.e.*, for a possible outage in the CDX or CEDRI or for a *force majeure* event). Such extensions are intended to be available only in extraordinary circumstances; they are limited in duration and do not relieve owners or operators of their reporting obligations. The electronic reporting amendments will increase the ease and efficiency of data submittal for owners and

operators of major source flexible polyurethane foam fabrication operations and will make the data more accessible to regulators and the public.

## **V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted**

### *A. What are the affected facilities?*

Currently, there are three major sources operating in the United States that are subject to the major source Flexible Polyurethane Foam Fabrication Operations NESHAP. The affected sources under the NESHAP include flexible polyurethane foam fabrication plant sites that operate loop slitters and/or flame laminators. Facilities that use loop slitter adhesive processes would be required to comply with a ban on the use of adhesives containing air toxics. However, the EPA estimates that current air toxic emissions from loop slitter adhesive users are essentially zero as the result of changes in adhesive composition required by OSHA's permissible exposure limit for methylene chloride that was enacted prior to the promulgation of the original MACT standard. Additionally, the EPA estimates that current air toxic emissions from flame laminators for the entire source category are less than 3.5 tpy.

Currently, there are approximately 32 area sources subject to the Flexible Polyurethane Foam Production and Fabrication NESHAP for area sources. The area source standard only regulates methylene chloride emissions, and, similar to the major source standards, emissions of methylene chloride are essentially zero, as required by OSHA's permissible exposure limit for methylene chloride that was enacted prior to the promulgation of the original GACT standards. Based on information provided by industry, there are no emissions of methylene chloride from these sources. For detailed information, please see the memorandum titled *Technology Review*



*for Flexible Polyurethane Foam Production and Fabrication Area Sources*, available in the docket for this action (Document ID EPA-HQ-OAR-2020-0572-0004).

*B. What are the air quality impacts?*

Current estimated emissions from the Flexible Polyurethane Foam Fabrication Operations source category are approximately 3.5 tpy. We do not estimate any HAP emission reductions from the final amendment adding MACT limits for existing flame laminators nor from the final amendment revising the definition of HAP-based adhesives for loop slitters. Both revisions reflect current practices.

*C. What are the cost impacts?*

The final amendments to the Flexible Polyurethane Foam Fabrication Operations NESHAP for major sources are expected to have minimal cost impacts. The costs are associated with periodic emissions performance testing, recordkeeping and reporting, electronic reporting, and reviewing the proposed rule. Three major source facilities are affected by these costs, although only two of them are affected by the emissions performance testing requirement. The periodic performance test is required every 5 years, but only for major source facilities that perform flame lamination. Most of the information requirements in the final rule are unchanged from those of the proposed rule. However, after proposal of this action, the EPA revised its cost estimates to incorporate updated information about the costs associated with reporting and performance testing for sources in the flame lamination subcategory. The cost estimates are slightly higher than at proposal. The revised cost estimates reflect that a performance test is required for each flame lamination line at a facility, although the labor required for each test is estimated to be lower than at proposal. See the Economic Impact Analysis in the docket and the

accompanying workbook for the updated assumptions and cost estimates (Docket ID No. EPA-HQ-OAR-2020-0572).

For the two affected facilities with flame lamination lines, the year 1 costs are estimated to be about \$22,000 per facility, while the undiscounted costs related to reporting and recordkeeping in the following years are estimated at about \$2,600 per facility per year except for year 6 when another emissions test is required. The undiscounted costs in year 6 are estimated to be about \$17,000 per facility for the sources with flame laminators. For the major source that does not perform flame lamination and thus does not need to fulfill the testing requirement, the costs in year 1 are estimated to be about \$6,000, while the undiscounted costs in the following years are estimated at about \$2,600 per year.

Because the final amendments to the Flexible Polyurethane Foam Production and Fabrication Area Sources NESHAP impose no new requirements on area sources, there will be no cost impacts for area sources.

*D. What are the economic impacts?*

The final amendments to the Flexible Polyurethane Foam Fabrication Operations NESHAP for major sources and the Flexible Polyurethane Foam Production and Fabrication NESHAP for area sources are not expected to have market impacts. Over a 10-year timeframe from 2022 to 2031, the net present value of the estimated cost impacts is about \$135,000 at a 3 percent discount rate and \$121,000 at a 7 percent discount rate in 2019 dollars. The equivalent annualized value of the cost impacts is about \$16,000 at a 3 percent discount rate and \$17,000 at a 7 percent discount rate. Since there are no expected costs for area sources, and the estimated costs for major sources are minimal, no significant economic impacts are anticipated due to the final amendments. For more information regarding the facility-level cost estimates as well as the

net present value and equivalent annualized value estimates, see the memorandum titled *Economic Impact Analysis for Final Residual Risk and Technology Review of the National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Fabrication Operations*, available in the docket for this action (Docket ID No. EPA-HQ-OAR-2020-0572).

*E. What are the benefits?*

This action will result in improvements to the rule and prevent backsliding. In general, backsliding is when a source uses a process, equipment, and/or ingredients that the industry in general has moved beyond in favor of processes, equipment, and/or ingredients with fewer potential adverse environmental impacts. Specifically, the final amendments codify existing industry practices both for existing flame laminators and for new and existing sources that use adhesives with loop slitters. The final amendments also revise the standards such that they always apply. Additionally, the final amendments requiring electronic submittal of initial notifications, performance test results, and semiannual reports will increase the usefulness of the data, are in keeping with current trends of data availability, will further assist in the protection of public health and the environment, and will ultimately result in less burden on the regulated community.

*F. What analysis of environmental justice did we conduct?*

Executive Order 12898 directs the EPA to identify the populations of concern who are most likely to experience unequal burdens from environmental harms—specifically, minority populations, low-income populations, and indigenous peoples (59 FR 7629, February 16, 1994). Additionally, Executive Order 13985 was signed to advance racial equity and support underserved communities through federal government actions (86 FR 7009, January 20, 2021). The EPA defines environmental justice as the fair treatment and meaningful involvement of all

people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The EPA further defines the term fair treatment to mean that “no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies” (<https://www.epa.gov/environmentaljustice>). In recognizing that minority and low-income populations often bear an unequal burden of environmental harms and risks, the EPA continues to consider ways of protecting them from adverse public health and environmental effects of air pollution.

Based on an analysis of exposed populations, the EPA determined that the source categories do not pose a disproportionately high adverse health impact on minority populations and/or low-income populations, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994) and referenced in Executive Order 13985 (86 FR 7009, January 20, 2021). The EPA remains committed to engaging with communities and stakeholders throughout the development of air pollution regulations.

To examine the potential for any environmental justice issues that might be associated with the major source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 kilometers (km) and within 50 km of the facilities. In the analysis, we also evaluated the distribution of HAP-related cancer and noncancer risks from the major source Flexible Polyurethane Foam Fabrication Operations source category across different demographic groups within the populations living near facilities.

The results of the demographic analysis for the major source category indicate that the minority population (being the total population minus the white population) is slightly higher within 5 km of the three facilities than the national percentage (40 percent versus 38 percent). This difference is accounted for by the larger African American population around the facilities (17 percent versus 12 percent nationally). In addition, the percentage of the population living within 5 km of facilities in the source category is greater than the corresponding national percentage for the demographic groups, “Ages 0 to 17” and “Below the Poverty Level.” When examining the risk levels of those exposed to emissions from Flexible Polyurethane Foam Fabrication facilities, we find that no one is exposed to a cancer risk at or above 1-in-1 million or to a chronic noncancer TOSHI greater than 1. The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Flexible Polyurethane Foam Fabrication Operations Source Category*, available in this docket for this action (Document ID EPA-HQ-OAR-2020-0572-0006).

*G. What analysis of children’s environmental health did we conduct?*

The EPA determined that the environmental health or safety risks addressed by this action do not present a disproportionate risk to children. The health risk assessments for this action are contained in the document titled *Residual Risk Assessment for the Flexible Polyurethane Foam Fabrication Source Category in Support of the 2021 Risk and Technology Review Final Rule* available in the docket (Docket ID No. EPA-HQ-OAR-2020-0572).

**VI. Statutory and Executive Order Reviews**

Additional information about these statutes and Executive Orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

*A. Executive Orders 12866: Regulatory Planning and Review and 13563: Improving Regulation and Regulatory Review*

This action is not a significant regulatory action and was, therefore, not submitted to OMB for review.

*B. Paperwork Reduction Act (PRA)*

The information collection activities in rule have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 2027.09. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them. The ICR is specific to information collection associated with the Flexible Polyurethane Foam Fabrication Operations source category, through amendments to 40 CFR part 63, subpart M. (The subject rulemaking imposes no new information collection associated with either the Flexible Polyurethane Foam Production area source category or the Flexible Polyurethane Foam Fabrication area source category.) We are finalizing changes to the recordkeeping and reporting requirements associated with 40 CFR part 63, subpart M, in the form of: requiring periodic (every 5 years) performance tests at major sources that perform flame lamination; eliminating the SSM plan and reporting requirements; including reporting requirements for deviations in the semiannual (periodic) report; and including the requirement for electronic submittal of reports. In addition, the number of facilities subject to the standards has changed. The number of respondents was reduced from 20 to 3 based on consultation with industry representatives and state/local agencies.

*Respondents/affected entities:* The respondents to the recordkeeping and reporting requirements are owners or operators of flexible polyurethane foam fabrication operations subject to 40 CFR part 63, subpart M.

*Respondent's obligation to respond:* Mandatory (40 CFR part 63, subpart M).

*Estimated number of respondents:* 3 facilities.

*Frequency of response:* The frequency of responses varies depending on the burden item. Responses include one-time review of rule amendments, reports of periodic performance tests, and semiannual compliance reports.

*Total estimated burden:* The annual recordkeeping and reporting burden for responding facilities to comply with all requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be 113 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 51 hours (per year) for the Agency. Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* The annual recordkeeping and reporting cost for responding facilities to comply with all requirements in the NESHAP, averaged over the 3 years of this ICR, is estimated to be \$21,600 (rounded, per year). The total operation and maintenance costs associated with performance test requirements, averaged over the 3 years of this ICR, is estimated to be \$10,100 per year. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be \$2,500.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. When OMB approves this ICR, the Agency will announce that approval in the *Federal Register* and publish a

technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

*C. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. As finalized, this action will impose new requirements only on major sources, and none of the major sources in the Flexible Polyurethane Foam Fabrication Operations source category are considered a small entity. Because this action imposes no new requirements on area sources, there will be no significant impact on any small entities among area sources. We have, therefore, concluded that this action will have no net regulatory burden for all directly regulated small entities.

*D. Unfunded Mandates Reform Act (UMRA)*

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. While this action creates an enforceable duty on the private sector, the cost does not exceed \$100 million or more.

*E. Executive Order 13132: Federalism*

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.



*F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have tribal implications as specified in Executive Order 13175. No tribal facilities are known to be engaged in the industries that would be affected by this action nor are there any adverse health or environmental effects from this action. Thus, Executive Order 13175 does not apply to this action.

*G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks*

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in sections IV.A of this preamble.

*H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

*I. National Technology Transfer and Advancement Act (NTTAA)*

This rulemaking does not involve technical standards.

*J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in the technical reports titled *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Flexible Polyurethane Foam Fabrication Source Category Operations* and *Residual Risk Assessment for the Flexible Polyurethane Foam Fabrication Source Category in Support of the 2021 Risk and Technology Review Final Rule*, available in the docket for this action (Document ID EPA–HQ–OAR–2020–0572–0006).

*K. Congressional Review Act (CRA)*

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

**List of Subjects in 40 CFR Part 63**

Environmental protection, Administrative practice and procedures, Air pollution control,  
Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

\_\_\_\_\_  
Dated:

\_\_\_\_\_  
**Michael S. Regan,**

*Administrator.*

For the reasons set out in the preamble, 40 CFR part 63 is amended as follows:

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR**

**POLLUTANTS FOR SOURCE CATEGORIES**

1. The authority citation for part 63 continues to read as follows:

**Authority:** 42 U.S.C. 7401 *et seq.*

**Subpart M-----National Emission Standards for Hazardous Air Pollutants: Flexible  
Polyurethane Foam Fabrication Operations**

2. Section 63.8784 is amended by revising paragraphs (c)(2) and (e) to read as follows:

**§63.8784 What parts of my plant does this subpart cover?**

\* \* \* \* \*

(c) \* \* \*

(2) If you add one or more flame lamination lines at a plant site where flame lamination lines already exist, the added line(s) shall be a new affected source and meet new source requirements if the added line(s) are at a flexible polyurethane foam fabrication plant site that has the potential to emit 10 tons per year or more of any HAP or 25 tons or more per year of any combination of HAP.

\* \* \* \* \*

(e) An affected source is existing if it commenced construction or reconstruction on or before August 8, 2001.

3. Section 63.8786 is amended by revising paragraph (b) and adding paragraph (f) to read as follows:

**§63.8786 When do I have to comply with this subpart?**

\* \* \* \* \*

(b) If you have an existing affected source, you must comply with this subpart according to paragraphs (b)(1) and (b)(2) of this section, as applicable.

(1) If you have an existing loop splitter affected source, you must comply with the emission standards for existing sources no later than April 14, 2004.

(2) If you have an existing flame lamination affected source, you must comply with the emission standards for existing sources no later than **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**.

\* \* \* \* \*

(f) You must comply with the electronic reporting requirements according to paragraphs (f)(1) and (f)(2) of this section.

(1) You must comply with the performance test and CMS performance evaluation requirements of §63.8818(j) on or before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**.

(2) You must comply with the compliance report requirements of §63.8818(k) on or before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]** or once the report template for this subpart has been available on the CEDRI website for 1 year, whichever date is later.

4. Section 63.8794 is amended by:

- a. Revising paragraphs (b), (c) and (d);
- b. Removing and reserving paragraph (e); and
- c. Revising paragraph (f) introductory text.

The revisions read as follows:

**§63.8794 What are my general requirements for complying with this subpart?**

\* \* \* \* \*

(b) For each flame lamination affected source, you must be in compliance with the requirements in this subpart at all times.

(c) At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(d) For flame lamination affected sources in §63.8786 using a control device to comply with the emission limitations in Table 1 to this subpart, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment during the period between the compliance date specified for your flame lamination affected source in §63.8786 and the date upon which continuous compliance monitoring systems required by §63.8810(c) have been installed and verified and any applicable operating limits have been set.

(e) [Reserved]

(f) For each monitoring system required by §63.8810(c) for flame lamination sources, you must develop and submit for approval a site-specific monitoring plan that addresses the requirements in paragraphs (f)(1) through (3) of this section.

\* \* \* \* \*

5. Section 63.8798 is amended by revising paragraph (b) and adding paragraph (c) to read as follows:

**§63.8798 By what date must I conduct performance tests or other initial compliance demonstrations?**

\* \* \* \* \*

(b) For each flame lamination affected source, you must conduct performance tests by the compliance date that is specified for your source in §63.8786 and according to the provisions in §63.7(a)(2).

(c) You must conduct subsequent performance tests to demonstrate compliance with the flame lamination emissions limitations in Table 1 to this subpart no less frequently than every 5 years from the date of the last performance test.

6. Section 63.8800 is amended by:

- a. Revising paragraphs (b), (c) and (e) introductory text;
- b. Redesignating paragraph (f) as (g);
- c. Adding new paragraph (f); and
- d. Revising redesignated paragraph (g) introductory text.

The revisions and additions read as follows:

**§63.8800 What performance tests and other procedures must I use to demonstrate compliance with the emission limit for flame lamination?**

\* \* \* \* \*

(b) Each performance test must be conducted according to the requirements in paragraph (c) of this section and under the specific conditions in Table 3 to this subpart.

(c) You must conduct each performance test under conditions representative of normal

operations. You may not conduct performance tests during periods of SSM. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

\* \* \* \* \*

(e) For new and reconstructed affected sources, you must determine the percent reduction of HAP emissions during the performance test according to paragraphs (e)(1) through (3) of this section.

\* \* \* \* \*

(f) For existing affected sources, you must determine the HCl emissions rate according to paragraphs (f)(1) through (3) of this section.

(1) Calculate the concentration of HCl in the vent outlet to the atmosphere or at the control device outlet, if a control device is used, using the procedures in the specified test method.

(2) Determine the vent outlet gas stream volumetric flow rate or if a control device is used, the control device outlet gas stream volumetric flow rate, using the procedures in the specified test method.

(3) Calculate the HCl emission rate for the period of the performance test using Equation 2 of this section:

$$E_{HCl} = C \times AOF \quad \text{Eq.2}$$

Where:



$E_{HCl}$  = Emission rate of HCl, lbs/hr.

C = average HCl concentration of vent or control device outlet stream for all test runs,  
lb/dscft.

AOF = average outlet volumetric flow rate of gas stream, dry basis, dscft/hr.

(g) You must also meet the requirements in paragraphs (g)(1) and (2) of this section.

\* \* \* \* \*

7. Section 63.8802 is amended by revising paragraphs (a)(1)(i) and (3)(i) to read as follows:

**§63.8802 What methods must I use to demonstrate compliance with the emission  
limitation for loop slitter adhesive use?**

(a) \* \* \*

(1) \* \* \*

(i) Include in the HAP total each HAP in Table 8 of this subpart that is measured at 0.1 percent by weight or more and any other HAP that is measured at 1.0 percent by weight or more. Express the weight fraction of each HAP you measure as a value truncated to four places after the decimal point (for example, 0.1234).

\* \* \* \* \*

(3) \* \* \*

(i) Include in the HAP total each HAP in Table 8 of this subpart that is present at 0.1 percent by weight or more and any other HAP that is present at 1.0 percent by weight or more.

\* \* \* \* \*

8. Section 63.8810 is amended by revising paragraphs (b) introductory text, (c) introductory text and (c)(1) to read as follows:

**§63.8810 How do I monitor and collect data to demonstrate continuous compliance?**

\* \* \* \* \*

(b) If you own or operate a flame lamination affected source, you must meet the requirements in paragraphs (b)(1) through (3) of this section if you use a scrubber, or paragraph (b)(4) of this section if you use any other control device.

\* \* \* \* \*

(c) If you own or operate a control device to meet the emissions limitations for a flame lamination affected source, you must meet the requirements in paragraphs (c)(1) through (4) of this section.

(1) Except for periods of monitoring-associated repairs and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating.

\* \* \* \* \*

9. Section 63.8812 is amended by:

- a. Revising paragraph (b);
- b. Removing and reserving paragraph (d); and
- c. Revising paragraph (e) introductory text.

The revisions read as follows:

**§63.8812 How do I demonstrate continuous compliance with the emission limitations?**

\* \* \* \* \*

(b) You must report each instance in which you did not meet each emission limit and each operating limit in Tables 1 and 2 to this subpart that applies to you. These instances are deviations from the operating limits in this subpart. These deviations must be reported according

to the requirements in §63.8818.

\* \* \* \* \*

(d) [Reserved]

(e) You must meet the following requirements if you are complying with the adhesive use ban for loop slitter adhesive use described in §63.8790(a).

\* \* \* \* \*

10. Section 63.8816 is amended by revising paragraphs (d), (f), (g) introductory text, and (h)(1) to read as follows:

**§63.8816 What notifications must I submit and when?**

\* \* \* \* \*

(d) If you own or operate a flame lamination affected source, submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in §63.7(b)(1).

\* \* \* \* \*

(f) If you own or operate a flame lamination affected source, submit a Notification of Compliance Status according to §63.9(h)(2)(ii) that includes the results of the performance test conducted according to the requirements in Table 3 to this subpart. You must submit the notification before the close of business on the 60<sup>th</sup> calendar day following the completion of the performance test according to §63.10(d)(2).

(g) For each flame lamination affected source, the Notification of Compliance Status must also include the information in paragraphs (g)(1) and (2) that applies to you.

(h) \* \* \*

(1) A list of each adhesive used at the affected source, its HAP content (percent by

weight), and the manufacturer or supplier of each.

\* \* \* \* \*

11. Section 63.8818 is amended by:

- a. Revising paragraphs (b) introductory text and (f);
- b. Removing and reserving paragraph (i); and
- c. Adding paragraphs (j) through (m).

The revisions and additions read as follows:

**§63.8818 What reports must I submit and when?**

\* \* \* \* \*

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each compliance report for flame lamination affected sources semiannually according to paragraphs (b)(1) through (4) of this section.

\* \* \* \* \*

(f) The compliance report for flame lamination affected sources required by §63.8810(c) to conduct continuous monitoring must also contain the following information in paragraphs (f)(1) and (2) of this section.

(1) If there were no periods during which the CPMS was out-of-control in accordance with the monitoring plan, a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(2) If there were periods during which the CPMS was out-of-control in accordance with the monitoring plan, the date, time, and duration of each out-of-control period.

\* \* \* \* \*

(i) [Reserved]

(j) *Performance Test and CMS Performance Evaluation Reports.* Beginning on **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER]**, within 60 days after the date of completing each performance test or CMS performance evaluation (as defined in §63.2) required by this subpart, the owner or operator must submit the results of the performance test or CMS performance evaluation following the procedures specified in paragraphs (j)(1) through (3) of this section.

(1) *Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test.* Submit the results of the performance test or the performance evaluation of CMS measuring relative accuracy test audit (RATA) pollutants to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) *Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.* The results of the performance test or the performance evaluation of CMS measuring RATA pollutants by methods that are not supported by the ERT, must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) *Confidential business information (CBI).* Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed CBI. Although we

do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information submitted under paragraph (a)(1) or (2) of this section, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated using the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraphs (a)(1) and (2) of this section. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(k) *Submitting reports electronically.* On and after the date specified in §63.8786(f)(2), you must submit reports to the EPA via CEDRI, which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as confidential business information (CBI). Anything submitted using CEDRI cannot later be claimed CBI. You must use the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for this subpart. The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in this subpart, regardless of the

method in which the report is submitted. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim, submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (k). All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(l) *Claims of EPA system outage.* When you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (l)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible

following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(m) *Claims of force majeure.* When you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (m)(1) through (5) of this section.

(1) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that



prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the force majeure event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(iii) Measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

12. Section 63.8820 is amended by revising paragraph (b) to read as follows:

**§63.8820 What records must I keep?**

\* \* \* \* \*

(b) For each flame lamination affected source, you must also keep the following records specified in paragraphs (b)(1) through (3) of this section.

- (1) Records of performance tests, as required in §63.10(b)(2)(viii).
- (2) Records of the operating parameter values required in §63.8810(b).
- (3) The records specified in paragraphs (b)(3)(i) through (iii) of this section.

(i) The number of deviations. For each deviation, record the date, time, cause, and duration of the deviation.

(ii) For each deviation, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(iii) Record actions taken to minimize emissions in accordance with §63.8794(c), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

\* \* \* \* \*

13. Section 63.8830 is amended by revising the definitions of “deviation” and “HAP-based adhesive” to read as follows:

**§63.8830 What definitions apply to this subpart?**

\* \* \* \* \*

*Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including any operating limit); or
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation (including any operating limit) in this subpart,

regardless of whether such failure is permitted by this subpart.

\* \* \* \* \*

*HAP-based adhesive* means an adhesive containing 1.0 percent by weight or more of any individual or combination HAP listed in Table 8 to this subpart or 1.0 percent by weight or more of any other individual HAP, according to information from the supplier or manufacturer of the material, EPA Method 311 (appendix A to 40 CFR part 63) or another approved alternative.

\* \* \* \* \*

14. Table 1 to subpart M M M M M is amended by revising entry 3 to read as follows:

**Table 1 to Subpart M M M M M of Part 63—Emission Limits**

As stated in §63.8790(a), you must comply with the emission limits in the following table:

For . . .	You must . . .
* * * * *	*
3. Each existing flame lamination affected source	Emit no more than 1.45 pounds per hour of HCl per flame lamination line.

15. Table 2 to subpart M M M M M is amended by revising the table title and introductory text to read as follows:

**Table 2 to Subpart M M M M M of Part 63—Operating Limits for Existing, New, or Reconstructed Flame Lamination Affected Sources**

As stated in §63.8790(b), you must comply with the applicable operating limits in the following table:

\* \* \* \* \*

16. Table 3 to subpart M M M M M is revised to read as follows:

**Table 3 to Subpart M M M M M of Part 63—Performance Test Requirements for Existing, New, or Reconstructed Flame Lamination Affected Sources**

As stated in §63.8800, you must comply with the requirements for performance tests for flame lamination affected sources in the following table using the requirements in rows 1 through 5 of the table if you are measuring HCl and using a scrubber, row 6 for new or reconstructed sources measuring HCN and using a scrubber, and row 7 if you are using any other control device. For existing sources not using a control device, you must comply with row 8 and rows 1 through 4 of the table.

<b>For each existing, new, or reconstructed flame lamination affected source, you must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
1. Select sampling port's location and the number of traverse ports	Method 1 or 1A in appendix A to part 60 of this chapter	Sampling sites must be located at the inlet and outlet of the scrubber and prior to any releases to the atmosphere.
2. Determine velocity	Method 2, 2A, 2C, 2D, 2F, or 2G in appendix A to part 60 of this chapter.	
3. Determine gas molecular weight	Not applicable	Assume a molecular weight of 29 (after moisture correction) for calculation purposes.
4. Measure moisture content of the stack gas	Method 4 in appendix A to part 60 of this chapter.	
5. Measure HCl concentration	Method 26A in appendix A to part 60 of this chapter	<p>i. For new or reconstructed sources, determine the HCl reduction efficiency of the control device using Method 26A and the procedures specified in §63.8800(e).</p> <p>ii. For existing sources, determine the HCl emission rate using Method 26A and the procedures specified in §63.8800(f).</p> <p>iii. Collect scrubber liquid flow rate, scrubber effluent pH, and pressure drop (pressure drop data only required for venturi scrubbers) every 15 minutes during the entire duration of each 1-hour test run, and determine the average scrubber liquid flow rate, scrubber effluent pH, and pressure drop (pressure drop data only</p>

		required for venturi scrubbers) over the period of the performance test by computing the average of all 15-minute readings.
6. Measure HCN concentration	A method approved by the Administrator	<p>i. Conduct the performance test according to the site-specific test plan submitted according to §63.7(c)(2)(i). Measure total HCN emissions and determine the reduction efficiency of the control device. Any performance test which measures HCN concentrations must be submitted for the administrator's approval prior to testing. You must use EPA Method 301 (40 CFR part 63, Appendix A) to validate your method.</p> <p>ii. Collect scrubber liquid flow rate, scrubber effluent pH, and pressure drop (pressure drop data only required for venturi scrubbers) every 15 minutes during the entire duration of each 1-hour test run, and determine the average scrubber liquid flow rate, scrubber effluent pH, and pressure drop (pressure drop data only required for venturi scrubbers) over the period of the performance test by computing the average of all 15-minute readings.</p>
7. If you use any control device other than a scrubber, establish operating parameter limits with which you will demonstrate continuous compliance with the emission limit that applies to the source	EPA-approved methods and data from the continuous parameter monitoring system	<p>i. Conduct the performance test according to the site-specific test plan submitted according to §63.7(c)(2)(i).</p> <p>ii. For new or reconstructed sources, determine the HCl or HCN reduction efficiency of the control device using the EPA-approved method and the procedures specified in §63.8800(e).</p> <p>iii. For existing sources, determine the HCl emission rate using the EPA-approved method and the procedures specified in §63.8800(f).</p> <p>iv. Collect operating parameter data as specified in the site-specific test plan.</p>
8. Measure HCl concentration	Method 26A in appendix A to part 60 of this chapter	Determine the HCl emission rate using the appropriate test methods and the procedures specified in §63.8800(f).

17. Table 4 to subpart M M M M M is amended by adding entry 4 to read as follows:

**Table 4 to Subpart M M M M M of Part 63—Initial Compliance With Emission Limits**

\* \* \* \* \*

For . . .	For the following emission limit . . .	You have demonstrated initial compliance if . . .
* * * * *	* * *	
4. Each existing flame lamination affected source	Emit no more than 1.45 pounds per hour of HCl per flame lamination line	The average HCl emissions, measured over the period of the performance test(s) do not exceed 1.45 pounds per hour per flame lamination line.

18. Table 5 to subpart M M M M M is amended by revising entries 2 and 3 to read as follows:

**Table 5 to Subpart M M M M M of Part 63—Continuous Compliance With Emission Limits and Operating Limits**

\* \* \* \* \*

For . . .	For the following emission limits or operating limits . . .	You must demonstrate continuous compliance by . . .
* * * * *		
2. Each existing, new, or reconstructed flame lamination affected source using a scrubber	* * *	* * *
3. Each existing, new, or reconstructed flame lamination affected source using any other control device	* * *	* * *

19. Table 6 to subpart M M M M M is amended by revising table introductory text and entry 4 and removing entry 5. The revisions read as follows:

**Table 6 to Subpart M M M M M of Part 63—Requirements for Reports**

You must submit a compliance report that includes the information in §63.8818(e) through (g) as well as the information in the following table, as applicable. Rows 1 and 3 of the following table apply to loop splitter affected sources. Rows 1 through 4 apply to flame

lamination affected sources.

<b>If . . .</b>	<b>Then you must submit a report or statement that . . .</b>
* * * * *	
4. There were periods during which the operating parameter monitoring systems were out-of-control in information in accordance with the monitoring plan	Contains the information in §63.8818(f)(2).

20. Table 7 to subpart MMMMM is amended to read as follows:

**Table 7 to Subpart MMMMM of Part 63—Applicability of General Provisions to Subpart MMMMM**

As stated in §63.8826, you must comply with the applicable General Provisions requirements according to the following table:

<b>Citation</b>	<b>Requirement</b>	<b>Applies to subpart MMMMM</b>	<b>Explanation</b>
§63.1	Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications	Yes	
§63.2	Definitions	Yes	Additional definitions are found in §63.8830.
§63.3	Units and abbreviations	Yes	
§63.4	Prohibited activities; compliance date; circumvention, severability	Yes	
§63.5	Construction/reconstruction applicability; applications; approvals	Yes	
§63.6(a)	Compliance with standards and maintenance requirements-applicability	Yes	
§63.6(b)(1)-(4)	Compliance dates for new or reconstructed sources	Yes	§63.8786 specifies compliance dates.
§63.6(b)(5)	Notification if commenced construction or reconstruction	Yes	

	after proposal		
§63.6(b)(6)	[Reserved]	Yes	
§63.6(b)(7)	Compliance dates for new or reconstructed area sources that become major	Yes	§63.8786 specifies compliance dates.
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes	§63.8786 specifies compliance dates.
§63.6(c)(3)-(4)	[Reserved]	Yes	
§63.6(c)(5)	Compliance dates for existing area sources that become major	Yes	§63.8786 specifies compliance dates.
§63.6(d)	[Reserved]	Yes	
§63.6(e)(1)(i)	General duty to minimize emissions	No	§63.8794(c) specifies general duty requirements.
§63.6(e)(1)(ii)	Requirement to correct malfunctions as soon as possible	No	
§63.6(e)(1)(iii)	Enforceability of requirements independent of other regulations	Yes	
§63.6(e)(2)	[Reserved]	Yes	
§63.6(e)(3)	SSM plans	No	
§63.6(f)(1)	Compliance except during SSM	No	
§63.6(f)(2)-(3)	Methods for determining compliance	Yes	
§63.6(g)	Use of an alternative nonopacity emission standard	Yes	
§63.6(h)	Compliance with opacity/visible emission standards	No	Subpart M does not specify opacity or visible emission standards.
§63.6(i)	Extension of compliance with emission standards	Yes	
§63.6(j)	Presidential compliance exemption	Yes	
§63.7(a)(1)-(2)	Performance test dates	Yes	Except for loop splitter affected sources as specified in §63.8798(a).
§63.7(a)(3)	Administrator's section 114 authority to require a performance test	Yes	
§63.7(b)	Notification of performance test and rescheduling	Yes	
§63.7(c)	Quality assurance program and	Yes	



	site-specific test plans		
§63.7(d)	Performance testing facilities	Yes	
§63.7(e)(1)	Conditions for conducting performance tests	No	Requirements for performance test conditions are found in §63.8800(b) and (c).
§63.7(e)(2)-(3)	Performance test data reduction and number of test runs	Yes	
§63.7(f)	Use of an alternative test method	Yes	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes	
§63.7(h)	Waiver of performance tests	Yes	
§63.8(a)(1)-(2)	Applicability of monitoring requirements	Yes	Unless otherwise specified, all of §63.8 applies only to new or reconstructed flame lamination sources. Additional monitoring requirements for these sources are found in §§63.8794(f) and (g) and 63.8804.
§63.8(a)(3)	[Reserved]	Yes	
§63.8(a)(4)	Monitoring with flares	No	Subpart M does not refer directly or indirectly to §63.11.
§63.8(b)	Conduct of monitoring and procedures when there are multiple effluents and multiple monitoring systems	Yes	
§63.8(c)(1)-(3)	Continuous monitoring system (CMS) operation and maintenance	No	CMS requirements are found in §63.8794(f) and (g).
§63.8(c)(4)	Continuous monitoring system requirements during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts	Yes	Applies as modified by §63.8794(g).
§63.8(c)(5)	Continuous opacity monitoring system (COMS) minimum procedures	No	Subpart M does not have opacity or visible emission standards.
§63.8(c)(6)	Zero and high-level calibration checks	Yes	Applies as modified by §63.8794(f).

§63.8(c)(7)-(8)	Out-of-control periods, including reporting	Yes	
§63.8(d)-(e)	Quality control program and CMS performance evaluation	No	CMS requirements are found in §63.8794(f) and (g).
§63.8(f)(1)-(5)	Use of an alternative monitoring method	Yes	
§63.8(f)(6)	Alternative to relative accuracy test	No	Only applies to sources that use continuous emissions monitoring systems (CEMS).
§63.8(g)	Data reduction	Yes	Applies as modified by §63.8794(g).
§63.9(a)	Notification requirements—applicability	Yes	
§63.9(b)	Initial notifications	Yes	Except §63.8816(c) requires new or reconstructed affected sources to submit the application for construction or reconstruction required by §63.9(b)(1)(iii) in lieu of the initial notification.
§63.9(c)	Request for compliance extension	Yes	
§63.9(d)	Notification that a new source is subject to special compliance requirements	Yes	
§63.9(e)	Notification of performance test	Yes	
§63.9(f)	Notification of visible emissions/opacity test	No	Subpart MMMMM does not have opacity or visible emission standards.
§63.9(g)(1)	Additional CMS notifications—date of CMS performance evaluation	Yes	
§63.9(g)(2)	Use of COMS data	No	Subpart MMMMM does not require the use of COMS.
§63.9(g)(3)	Alternative to relative accuracy testing	No	Applies only to sources with CEMS.
§63.9(h)	Notification of compliance status	Yes	
§63.9(i)	Adjustment of submittal deadlines	Yes	
§63.9(j)	Change in previous information	Yes	

§63.9(k)	Electronic reporting procedures	Yes	Only as specified in §63.9(j).
§63.10(a)	Recordkeeping/reporting applicability	Yes	
§63.10(b)(1)	General recordkeeping requirements	Yes	§§63.8820 and 63.8822 specify additional recordkeeping requirements.
§63.10(b)(2)(i) and (ii)	Records related to SSM periods and CMS	No	See §63.8820 for recordkeeping of (1) date, time, and duration; (2) listing of affected source or equipment, and an estimate of the quantity of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and correct the failure.
§63.10(b)(2)(iii)	Records of maintenance on air pollution control equipment.	Yes	
§63.10(b)(2)(iv) and (v)	Records related to SSM	No	
§63.10(b)(2)(vi) – (xi)	Records of CMS and other compliance records	Yes	
§63.10(b)(2)(xii)	Records when under waiver	Yes	
§63.10(b)(2)(xiii)	Records when using alternative to relative accuracy test	No	Applies only to sources with CEMS.
§63.10(b)(2)(xiv)	All documentation supporting initial notification and notification of compliance status	Yes	
§63.10(b)(3)	Recordkeeping requirements for applicability determinations	Yes	
§63.10(c)	Additional recordkeeping requirements for sources with CMS	Yes	Applies as modified by §63.8794(g).
§63.10(d)(1)	General reporting requirements	Yes	§63.8818 specifies additional reporting requirements.
§63.10(d)(2)	Performance test results	Yes	
§63.10(d)(3)	Opacity or visible emissions observations	No	Subpart M does not specify opacity or visible emission standards.

§63.10(d)(4)	Progress reports for sources with compliance extensions	Yes	
§63.10(d)(5)	SSM reports	No	
§63.10(e)(1)	Additional CMS reports—general	Yes	Applies as modified by §63.8794(g).
§63.10(e)(2)(i)	Results of CMS performance evaluations	Yes	Applies as modified by §63.8794(g).
§63.10(e)(2)	Results of continuous opacity monitoring systems performance evaluations	No	Subpart MMMMMM does require the use of COMS.
§63.10(e)(3)	Excess emissions/CMS performance reports	Yes	Only applies to new or reconstructed flame lamination affected sources.
§63.10(e)(4)	Continuous opacity monitoring system data reports	No	Subpart MMMMMM does not require the use of COMS.
§63.10(f)	Recordkeeping/reporting waiver	Yes	
§63.11.	Control device requirements—applicability	No	Facilities subject to subpart MMMMMM do not use flares as control devices.
§63.12	State authority and delegations	Yes	§63.8828 lists those sections of subparts MMMMMM and A that are not delegated.
§63.13	Addresses	Yes	
§63.14	Incorporation by reference	Yes	Subpart MMMMMM does not incorporate any material by reference.
§63.15	Availability of information/confidentiality.	Yes	

21. Table 8 to Subpart MMMMMM of Part 63 is added to read as follows:

**Table 8 to Subpart MMMMMM of Part 63—List of Hazardous Air Pollutants That Must Be Counted Toward Total HAP Content if Present at 0.1 Percent or More by Weight**

Chemical Name	CAS No.
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2-Trichloroethane	79-00-5
1,1-Dimethylhydrazine	57-14-7
1,2-Dibromo-3-chloropropane	96-12-8
1,2-Diphenylhydrazine	122-66-7
1,3-Butadiene	106-99-0
1,3-Dichloropropene	542-75-6

1,4-Dioxane	123-91-1
2,4,6-Trichlorophenol	88-06-2
2,4/2,6-Dinitrotoluene (mixture)	25321-14-6
2,4-Dinitrotoluene	121-14-2
2,4-Toluene diamine	95-80-7
2-Nitropropane	79-46-9
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
4,4'-Methylene bis(2-chloroaniline)	101-14-4
Acetaldehyde	75-07-0
Acrylamide	79-06-1
Acrylonitrile	107-13-1
Allyl chloride	107-05-1
alpha-Hexachlorocyclohexane (a-HCH)	319-84-6
Aniline	62-53-3
Benzene	71-43-2
Benzidine	92-87-5
Benzotrichloride	98-07-7
Benzyl chloride	100-44-7
beta-Hexachlorocyclohexane (b-HCH)	319-85-7
Bis(2-ethylhexyl)phthalate	117-81-7
Bis(chloromethyl)ether	542-88-1
Bromoform	75-25-2
Captan	133-06-2
Carbon tetrachloride	56-23-5
Chlordane	57-74-9
Chlorobenzilate	510-15-6
Chloroform	67-66-3
Chloroprene	126-99-8
Cresols (mixed)	1319-77-3
DDE	3547-04-4
Dichloroethyl ether	111-44-4
Dichlorvos	62-73-7
Epichlorohydrin	106-89-8
Ethyl acrylate	140-88-5
Ethylene dibromide	106-93-4
Ethylene dichloride	107-06-2
Ethylene oxide	75-21-8
Ethylene thiourea	96-45-7
Ethylidene dichloride (1,1-Dichloroethane)	75-34-3
Formaldehyde	50-00-0
Heptachlor	76-44-8
Hexachlorobenzene	118-74-1
Hexachlorobutadiene	87-68-3

Hexachloroethane	67-72-1
Hydrazine	302-01-2
Isophorone	78-59-1
Lindane (hexachlorocyclohexane, all isomers)	58-89-9
m-Cresol	108-39-4
Methylene chloride	75-09-2
Naphthalene	91-20-3
Nitrobenzene	98-95-3
Nitrosodimethylamine	62-75-9
o-Cresol	95-48-7
o-Toluidine	95-53-4
Parathion	56-38-2
p-Cresol	106-44-5
p-Dichlorobenzene	106-46-7
Pentachloronitrobenzene	82-68-8
Pentachlorophenol	87-86-5
Propoxur	114-26-1
Propylene dichloride	78-87-5
Propylene oxide	75-56-9
Quinoline	91-22-5
Tetrachloroethene	127-18-4
Toxaphene	8001-35-2
Trichloroethylene	79-01-6
Trifluralin	1582-09-8
Vinyl bromide	593-60-2
Vinyl chloride	75-01-4
Vinylidene chloride	75-35-4

**Subpart OOOOOO—National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources**

22. Section 63.11416 is amended by revising paragraphs (b) and (f) to read as follows:

**§63.11416 What are the standards for new and existing sources?**

\* \* \* \* \*

(b) If you own or operate a new or existing slabstock polyurethane foam production affected source, you must not use any material containing methylene chloride for any purpose in any slabstock flexible foam production process.

\* \* \* \* \*

(f) You may demonstrate compliance with the requirements in paragraphs (b) through (e) of this section using adhesive usage records, Material Safety Data Sheets, and engineering calculations.

23. Section 63.11417 is amended by:

- a. Revising paragraph (b) introductory text;
- b. Removing and reserving paragraph (b)(1); and
- c. Revising paragraph (b)(2) to read as follows:

**§63.11417 What are the compliance requirements for new and existing sources?**

\* \* \* \* \*

(b) Each owner or operator of a new or existing slabstock flexible polyurethane foam production affected source must comply with paragraphs (b)(2) and (3) of this section.

(1) [Reserved]

(2) You must submit a notification of compliance status report no later than 180 days after your compliance date. The report must contain this certification of compliance, signed by a responsible official, for the standards in §63.11416(b): “This facility uses no material containing methylene chloride for any purpose on any slabstock flexible foam process.”

\* \* \* \* \*

24. Section 63.11418 is amended to read as follows:

**§63.11418 What General Provisions apply to this subpart?**

The provisions in 40 CFR part 63, subpart A, do not apply to sources subject to this subpart.

25. Table 1 to Subpart OOOOOO of Part 63—Applicability of General Provisions to Subpart OOOOOO is removed.

Message

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**From:** Wachter, Eric [Wachter.Eric@epa.gov]  
**Sent:** 10/25/2021 1:29:28 PM  
**To:** Utech, Dan [Utech.Dan@epa.gov]  
**Subject:** For Administrator's Digital Signature (today): Notice and Opportunity to Comment: Withdrawal of 2 Answers to Frequent Questions About Property Management Companies & the Toxic Substances Control Act Lead-Based Paint Renovation, Repair, and Painting Rule  
**Attachments:** 9204-01-OECA Lead Notice\_ADMIN.docx; Action Memo FR notice to Withdraw Answers to Frequent Questions about Property Management Companies\_10 22 21.pdf

Hi, Dan,

Please see attached an FR notice for the Administrator's signature. I'll let them know he is on travel. I just received this request this morning.

Thank you,

Eric

**DEADLINE / TIMELINES:**

This is a non-regulatory action without a statutory or court deadline. However, the program would like to send this to the Office of the Federal Register on **Monday, October 25**, as they believe this is a significant action for the prevention of lead contamination and are targeting publication in the *Federal Register* for Thursday, October 28, 2021, during National Lead Poisoning Prevention Week (October 25-29, 2021).



**ENVIRONMENTAL PROTECTION AGENCY****[EPA-EPA-HQ-OECA-2021-0763; FRL-9204-01-OECA]****Withdrawal of Two Answers to Frequent Questions About Property Management Companies and the Toxic Substances Control Act Lead-Based Paint Renovation, Repair, and Painting Rule****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Notice and opportunity for public comment.

**SUMMARY:** The EPA intends to withdraw two Frequently Asked Questions (FQs) concerning property management companies (PMCs) and their compliance responsibilities under the Toxic Substances Control Act (TSCA) Lead Renovation, Repair and Painting (RRP) Rule. This notice explains the rationale for the withdrawal, the impact on the regulated community, how EPA will exercise its enforcement discretion, and invites public comment. The requirements of the RRP rule are intended to protect people, especially children, from the hazardous health effects of lead from lead-based paint.

**DATES:** The EPA intends to withdraw FQ 23002-13650 and 23002-18348 (the “PMC FQs”), found below and at <https://www.epa.gov/lead/fqs-rrp-rule> on **[insert date 135 days after publication in the Federal Register]**. However, due to the significant public interest in the issues addressed in this notice, the EPA is providing an opportunity for public comment on the EPA’s intended action. The EPA is requesting comments by **[insert date 30 days after publication in the Federal Register]** to identify any relevant information that could change the EPA’s decision to withdraw these two FQs. Following the comment period and the Agency’s consideration of comments received by that date, the EPA intends to post a memorandum that states whether the withdrawal will take effect as planned. The EPA would make the memorandum available on its website at: [www.epa.gov/lead](http://www.epa.gov/lead), and in the public comment docket for this notice at Docket EPA-HQ-OECA-2021-0763. By providing advance notice of the planned withdrawal of the FQs in 135 days from publication in the *Federal Register*, the EPA is providing more than sufficient time for PMCs to obtain any needed certification under the Lead RRP

rule.

**ADDRESSES:** You may send comments, identified by Docket ID No. EPA-HQ-OECA-2021-0763, by any of the following methods:

- Federal eRulemaking Portal: <https://www.regulations.gov/> (our preferred method). Follow the online instructions for submitting comments.
- Agency Web Site: [www.epa.gov/lead](http://www.epa.gov/lead). Follow the online instructions for submitting comments.
- Mail: U.S. Environmental Protection Agency, EPA Docket Center, OECA Docket, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.
- Hand Delivery / Courier: EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. The Docket Center's hours of operations are 8:30 a.m. – 4:30 p.m., Monday – Friday (except Federal Holidays).

*Instructions:* All submissions received must include the Docket ID No. for this notice. Comments received may be posted without change to <https://www.regulations.gov/>, including any personal information provided. For detailed instructions on sending comments and additional information on the notice, see the “Public Participation” heading of the SUPPLEMENTARY INFORMATION section of this document. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are open to the public by appointment only to reduce the risk of transmitting COVID-19. Our Docket Center staff also continues to provide remote customer service via email, phone, and webform. Hand deliveries and couriers may be received by scheduled appointment only. For further information on EPA Docket Center services and the current status, please visit us online at <https://www.epa.gov/dockets>.

**FOR FURTHER INFORMATION CONTACT:** Aimee Hessert, Federal Facilities Enforcement Office (MC 2261A), Environmental Protection Agency, 1200 Pennsylvania Ave, NW, Washington DC 20460;

telephone number: (202) 564-0993; email address: [hessert.aimée@epa.gov](mailto:hessert.aimée@epa.gov); and Amos Presler, Office of Civil Enforcement (MC 2249A), Environmental Protection Agency, 1200 Pennsylvania Ave, NW, Washington DC 20460; telephone number: (202) 564-1076; email address: [presler.amos@epa.gov](mailto:presler.amos@epa.gov). Comments or questions submitted by email must include "Docket EPA-HQ-OECA-2021-0763" in the subject line of the email message.

## **SUPPLEMENTARY INFORMATION:**

### **I. Public Participation**

#### *A. Written Comments*

Submit your comments, identified by Docket ID No. EPA-HQ-OECA-2021-0763, at <https://www.regulations.gov> (our preferred method), or the other methods identified in the ADDRESSES section. Once submitted, comments cannot be edited or removed from the docket. The EPA may publish any comment received to its public docket. Do not submit to EPA's docket at <https://www.regulations.gov> any information you consider to be Proprietary Business Information (PBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

Due to public health concerns related to COVID-19, the EPA Docket Center and Reading Room are open to the public by appointment only. Our Docket Center staff also continues to provide remote

customer service via email, phone, and webform. For further information and updates on EPA Docket Center services, please visit us online at <https://www.epa.gov/dockets>.

The EPA continues to carefully and continuously monitor information from the Centers for Disease Control and Prevention (CDC), local area health departments, and our Federal partners so that we can respond rapidly as conditions change regarding COVID-19.

## **II. GENERAL INFORMATION**

### *A. Does This Action Affect You?*

This announcement matters to you if you are a PMC, if you are employed by a PMC, if you live in target housing managed by a PMC, or if you work with PMCs on renovation, repair or painting activities covered by the EPA's RRP rule. Target housing includes residential dwellings constructed before 1978. This notice also matters to you if you have a child under the age of 6 years who regularly visits a "child-occupied facility," such as a daycare or a kindergarten, in a pre-1978 building managed by a PMC.

### *B. Intended Action*

This Notice by the Environmental Protection Agency (EPA) announces it intends to withdraw two Frequently Asked Questions ("FQs") concerning property managers and property management companies (collectively, "property management companies" or "PMCs") and their compliance responsibilities under the Lead-based Paint Renovation, Repair, and Painting Rule ("RRP rule"), section 402(c) of the Toxic Substances Control Act (TSCA), 40 CFR part 745, subpart E, including the pre-renovation information distribution requirements promulgated under TSCA section 406(b) and codified at 40 CFR 745.84. The FQs are viewable on the EPA website: [ HYPERLINK "<http://www.epa.gov/lead/fqs-rrp-rule>" ].

The first of the PMC FQs to be withdrawn indicated the EPA's prior statement that a PMC did not need

to obtain firm certification for itself or renovator certification for an employee if none of its employees “do the work” of the renovation:

**Question (23002-13650):** A property management company performs most of the clerical functions of the business, and hires plumbers, electricians, carpenters, etc., for its renovation needs. Does the property management company need firm certification?

**Answer:** A property management company acts as an agent for the landlord and has the same responsibilities as the landlord under the RRP rule. Therefore, if the property management company uses its own employees to do the work, the property management company must be a certified firm and one of the employees must be a certified renovator. If the property management company hires a renovation firm to perform the renovation, the property management company does not need firm or renovator certification, but the firm the property management company hires must be certified and must perform the renovation using a certified renovator that directs and provides on-the-job training to any workers that are not certified renovators.

The second of the two PMC FQs explained how the EPA would exercise its enforcement discretion under circumstances in which a certified firm hired by the PMC fails to comply with a requirement of the RRP rule:

**Question (23002-18348):** If a property management company hires a certified firm to perform a renovation and the firm violates the RRP rule, for example, by failing to distribute the necessary materials or keep proper records, which entity is subject to enforcement action, the property manager or the certified firm?

**Answer:** It is the certified firm’s responsibility to comply with the requirements of the RRP rule, and any enforcement action taken would be against the firm.

With the withdrawal of FQ 23002-13650 and FQ 23002-18348, the EPA would assess compliance by PMCs with the RRP rule, as it would for any other entity, according to the broadly applicable language of the RRP rule: that no firm may perform, offer, or claim to perform renovations without certification

from EPA in target housing or child-occupied facilities (unless the renovation qualifies for a specified exception). See, e.g., 40 CFR 745.81(a)(2)(ii). Furthermore, the EPA will evaluate compliance and appropriate enforcement actions on the basis of each case's individual facts and circumstances, and the EPA may exercise its enforcement discretion regarding PMC obligations.

As stated in the introduction to the current FQs document (available at <https://www.epa.gov/lead/answers-frequent-questions-about-epas-lead-renovation-repair-and-painting-rrp-rule>), the FQs present the agency's preliminary responses, may be periodically revised, and do not necessarily bind the EPA to a specific application of the RRP rule. This notice, like the PMC FQs, is intended solely for guidance and does not alter any statutory or regulatory requirements and does not create binding obligations.

For information on how to get certified, please see <https://www.epa.gov/lead/renovation-repair-and-painting-program-contractors>

### *C. Background*

The RRP rule is intended to protect residents of pre-1978 homes from lead-based paint disturbed in the course of renovation, repair or painting activities. Compliance with the RRP rule's requirements protects people from the hazardous health effects of lead, especially children six years old and younger and pregnant women, both of whom are most susceptible to the effects of lead. Even low levels of lead in the blood of children can result in: behavior and learning problems; lower IQ and hyperactivity; slowed growth; hearing problems; and anemia. In rare cases, ingestion of lead can cause seizures, coma and even death. Lead accumulates in the body over time, where it is stored in the bones along with calcium. During pregnancy, lead is released from the pregnant mother's bones, along with calcium, and can pass from the mother, exposing the fetus or the breastfeeding infant to lead. This can result in serious effects to the developing fetus and infant. It can cause the baby to be born too early or too small; hurt the baby's brain, kidneys, and nervous system; increase the likelihood of learning or behavioral problems; and put the mother at risk for miscarriage.

Congress recognized almost thirty years ago, upon enactment of the legislation that included TSCA Title IV, that lead in paint was responsible for "low-level lead poisoning [that was] widespread among

American children, afflicting as many as 3,000,000 children under age 6, with minority and low-income communities disproportionately affected.” 42 U.S.C. 4851. Disproportionate risks of lead exposure in minority and low-income communities persist today.<sup>1</sup> Withdrawal of the PMC FQs is important for the safety of all who live in PMC-managed housing, and it is vitally important to the health of children under the age of 6 years, particularly in communities burdened by exposure to high levels of lead-based paint in pre-1978 housing. Communities with environmental justice concerns often include a higher proportion of rental housing. PMCs manage a significant portion of the nation’s rental housing market, and each PMC often manages a large number of rental housing units. For example, the largest 50 PMCs alone control 3.4 million units.<sup>2</sup> PMCs also manage approximately 205,000 family housing projects, which comprise 99% of privatized military housing. More than 3.18 million children under the age of 6 years live in pre-1980 rental housing.<sup>3</sup> A portion of these children may be at risk of exposure to lead-based paint hazards.

#### *D. RRP Rule Applicability*

The RRP rule broadly applies to renovation, repair or painting activities performed for compensation that disturb painted surfaces in target housing and child occupied facilities.

When the EPA developed the RRP rule, as required by section 402(c) of TSCA, it defined the scope of the RRP rule based on the circumstances of the renovation, repair and painting activity, rather than the person or entity performing the renovation. The RRP rule “applies to all renovations performed for compensation in target housing and child-occupied facilities . . . .” 40 CFR 745.82(a). The purpose of this broad application, as stated in the regulation is “to ensure” that “individuals performing renovations . . . are properly trained; renovators and firms performing these renovations are certified; and the work practices in [the regulation] are followed . . . .” § 745.80(b). Work practice requirements, such as work-area containment, and a prohibition on certain work practices, such as open-flame burning, minimize exposure to lead-based paint hazards.

The regulations provide that “no firm may perform, offer, or claim to perform renovations without certification from EPA . . . in target housing or child-occupied facilities [unless an exception applies].”

§ 745.81(a)(2)(ii). The regulations broadly define “firms” to include: “a company, partnership, corporation, sole proprietorship or individual doing business, association, or other business entity; a Federal, State, Tribal or local government agency; or a nonprofit organization.” § 745.83.

#### *E. Basis for EPA’s PMC FQs*

In an effort to help the public understand and comply with the RRP rule, the EPA posted answers to frequent questions on its website at <https://www.epa.gov/lead/fqs-rrp-rule> (“FQ document”). When the EPA added the PMC FQs to the FQ document in 2010, it did not have experience with implementation of the RRP rule and the PMC industry’s response to it. PMC FQ 23002-13650 states, “if the property management company hires a renovation firm to perform the renovation, the property management company does not need firm or renovator certification.” The FQ, which as noted above is not binding, analogized PMCs to landlords and provided that a PMC that did not use its own employees “to do the work” would not have enforceable obligations under the RRP rule and, for example, would not need to ensure that lead-safe work practices were followed. The FQ did not elaborate on the phrase “do the work.” At the time the FQ was written, EPA generally did not think that a PMC that hired a renovation firm to perform a renovation would itself be doing work such that it also would be performing or offering to perform the renovation for compensation. Therefore, EPA did not think the PMC would need to comply with the RRP rule and need to be a certified firm. Consistent with this prior interpretation, FQ 23002-18348 states that any enforcement action taken would be against the renovation firm, not the PMC. EPA now has experience implementing the RRP rule and understands there are circumstances where a PMC hires a renovation firm to perform the renovation, and also engages in activities such that the PMC also performs or offers to perform the renovation, and these circumstances are described in more detail in this notice.

#### *F. EPA’s Experience Implementing the RRP Rule Supports Withdrawal of the PMC FQs*

The EPA has gained experience implementing the RRP rule since 2010 and, based on this experience, has a better understanding of the activities commonly undertaken by PMCs. As explained below, the



EPA has concluded that it is not appropriate to make categorical assumptions about PMC compliance obligations and that these obligations should be determined based on the facts and circumstances of each individual case. While PMCs may in some instances and in some circumstances act as agents of a landlord, unlike landlords they are not property owners, but instead are a distinct type of entity that performs services for compensation. In the EPA's experience, PMCs often do not hire certified renovation firms. Furthermore, the EPA has found many circumstances where a PMC that hires a renovation firm for a renovation also performs or offers to perform the renovation for compensation in target housing. For example, in some cases, the PMC might offer to perform renovation, repair, or painting activities through its contractual agreements with the building owner, and in other cases the PMC might perform an element of the renovation for compensation.

Given the EPA's understanding of these circumstances, the EPA intends to assess compliance by PMCs with the RRP rule, just as it would for any other entity, in accordance with the broadly applicable language of the RRP rule: that no firm may perform, offer, or claim to perform regulated renovations without certification from the EPA in target housing or child-occupied facilities. See, e.g., 40 CFR 745.81(a)(2)(ii). Consistent with the requirements in the RRP rule, the EPA will evaluate compliance and appropriate enforcement actions on the basis of each case's individual facts and circumstances, and the EPA may exercise its enforcement discretion regarding PMC obligations.

#### *G. Examples of PMCs' Varying Levels of Involvement with Renovations*

The following discussion is intended to help elaborate on how the RRP rule may apply to PMCs when they hire a renovation firm. In some cases, the PMC might offer to perform renovation, repair, or painting activities through its contractual agreements with the building owner, and in other cases the PMC might perform an element of the renovation for compensation.

When a PMC enters into a business relationship with the property owner, the PMC typically agrees to perform various property management services. In some circumstances, a PMC's services may be strictly limited to leasing and rent collection. That circumstance would be unlikely to give rise to facts indicating that a PMC "performed" a renovation.

More often, a PMC agrees to provide—and is compensated for—property management services that

include maintenance, repair, painting, renovations, or other activities that disturb painted surfaces and may be subject to the RRP rule and require a certified renovator. In such agreements, oral contracts, or written contracts, the agreement obligates the PMC to perform the renovation. Whether the PMC uses its own employees to perform the work or hires an outside firm to perform the work, the PMC remains obligated by such an agreement with the property owner (and typically is compensated for fulfilling such obligations) to ensure that the renovation is performed.

Specification of such “renovation” responsibilities in a written contract between a property owner and a PMC is not essential to establishing RRP rule applicability to the PMC, especially if other facts establish that the PMC offered to perform or actually did perform some other action necessary to ensure the performance of a renovation activity.

When a PMC hires a firm for renovation, repair or painting activities, the PMC, as part of the business relationship with the property owner, is typically compensated for managing certain activities that are necessary or even integral to the performance of the renovation, repair or painting activity, including (but not limited to):

- Soliciting and evaluating contractor bids;
- Applying for permits, as appropriate;
- Granting contractors access to the property;
- Overseeing contractor work on the property;
- Informing tenants of renovation activity;
- Verifying completion of renovation activity; or
- Remitting payment to the contractors.

The PMC may even oversee or supervise the outside renovation firms, individuals and contractors who are not the PMC’s employees but are doing activities that are recognized as part of the renovation in the RRP rule. The PMC may also coordinate work schedules of the various outside contractors.

Compensation of a PMC by the property owner for any of these or similar activities may establish that a PMC is performing a renovation for compensation and must comply with the RRP rule, even if the PMC uses an independent contractor instead of its own employees to do the specific activities that disturb

paint surfaces. Consistent with the requirements in the RRP rule, the EPA will evaluate compliance and appropriate enforcement actions on the basis of each case's individual facts and circumstances, and the EPA may exercise its enforcement discretion regarding PMC obligations.

#### *H. Why Withdrawal of the PMC FQs is Preferable*

The EPA has over ten years of experience with the PMC FQs and has concluded, as discussed above, that these FQs have contributed to non-compliance with the RRP rule in rental property managed by PMCs.

EPA's experience also has shown that PMCs routinely hire smaller, uncertified firms to conduct RRP activities. Collectively these hiring decisions by PMCs have an outsized impact on worksite compliance at properties managed by PMCs as the numerous contractors for renovation, repair and painting activities are often small and transitory. Withdrawing the PMC FQs signals that EPA plans to hold both the PMCs and the contractors they hire responsible for compliance if the circumstances indicate that both entities performed or offered to perform renovations for compensation in target housing or child-occupied facilities.

Withdrawal of the PMC FQs and the discussion in this notice helps to increase the impact and effectiveness of the RRP Rule and improve compliance in rental properties managed by PMCs. The EPA seeks to explain the circumstances that may give rise to compliance obligations for PMCs under the RRP Rule. We also aim to identify the potential enforcement consequences for a PMC that performs or offers to perform renovations for compensation without considering its role in RRP rule compliance.

#### *I. Assessing Compliance for PMCs*

The EPA is cognizant that PMCs relying on the EPA's PMC FQs may have declined to obtain RRP certification themselves or ensure the RRP compliance of contractors they hired. Therefore, through this notice, the EPA is informing the public and PMCs that EPA intends to withdraw FQs 23002-13650 and 23002-18348 and intends, upon withdrawal, to assess compliance by PMCs that are performing or

offering to perform renovations for compensation—either by using their own employees or hiring an outside firm—according to the same requirements placed upon any other entity that performs or offers to perform a renovation for compensation in target housing or child-occupied facilities.

Consistent with the RRP rule, any individual or entity (including PMCs) is subject to the RRP rule requirements when they perform or offer to perform renovation, repair or painting activities for compensation in housing and child-occupied facilities built before 1978, and therefore must be a certified firm.

Requirements for certified firms include, among other things: obtaining firm certification; providing owners and occupants with the EPA's *Renovate Right* pamphlet; assigning a certified renovator to the RRP activity (or ensuring assignment of a contractor's certified renovator); ensuring all workers onsite are certified or receive on-the-job training from a certified renovator; ensuring use of lead-safe work practices and clean-up; ensuring documentation of compliance of lead-safe work practices that minimize the release of lead-based paint hazards such as paint chips and dust containing lead; and providing that documentation to the EPA and to EPA-authorized state programs upon request.

By providing advance notice of the planned withdrawal of the FQs in 135 days, the EPA is providing more than sufficient time for PMCs to obtain any needed certification under the Lead RRP rule. For information on how to get certified, please see <https://www.epa.gov/lead/renovation-repair-and-painting-program-contractors>.

Michael S. Regan,  
Administrator.

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<sup>1</sup> Hauptman, et al., *Individual- and Community-Level Factors Associated with Detectable and Elevated Blood Lead Levels in US Children: Results From a National Clinical Laboratory*, JAMA Pediatrics (published online September 27, 2021) (finding statistically significant associations between detectable or elevated blood lead levels and zip codes with concentrations of poverty, Black populations, or Hispanic populations, and other community factors).

<sup>2</sup> National Multifamily Housing Council (NMHC) (tallying 3,405,227 rental units under management by 50 PMCs). <https://www.nmhc.org/research-insight/the-nmhc-50/top-50-lists/2019-managers-list/>

<sup>3</sup> American Housing Survey Table, 2019 National – Household Demographics – All Occupied Units – Tenure Filter: Renter – Year Built Variable (2019) (rental filtered sum of pre-1980 households (columns I-M) with one child under 6 years (rows 170-71, 176-77, 182-83) plus doubled sum of pre-1980 households of two or more children under 6 years old (rows 172,73, 178-79, 184-85) yields a *minimum* estimate of 3,188,000 children under

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6 years old in pre-1980 rental housing). Spreadsheet is derived from the Custom AHS Table tool maintained by the U.S. Census at [\[ HYPERLINK "https://www.census.gov/programs-surveys/ahs" \]](https://www.census.gov/programs-surveys/ahs).



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
WASHINGTON, D.C. 20460

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

October 22, 2021

**MEMORANDUM**

**SUBJECT:** Notice: Withdrawal of Two Answers to Frequent Questions about Property Management Companies and the Toxic Substances Control Act Lead-based Paint Renovation, Repair and Painting Rule (Non-regulatory, No-tier Action) – **ACTION MEMORANDUM**

**FROM:** Lawrence E. Starfield  
Acting Assistant Administrator

**LAWRENCE  
STARFIELD**

Digitally signed by  
LAWRENCE STARFIELD  
Date: 2021.10.22 17:00:30  
-04'00'

**THRU:** Office of Policy (1803A)  
Office of Executive Secretariat (1105A)

**TO:** Michael S. Regan  
Administrator (1101A)

**PURPOSE**

On behalf of Michal Freedhoff and myself, attached for your signature is a Notice for publication in the Federal Register, titled Withdrawal of Two Answers to Frequent Questions about Property Management Companies and the Toxic Substances Control Act Lead-based Paint Renovation, Repair and Painting Rule.

**DEADLINE/TIMELINES**

This is a non-regulatory action without a statutory or court deadline. However, our offices would like to send this to the Office of the Federal Register on Monday, October 25, as we believe this is a significant action for the prevention of lead contamination, and we are targeting publication in the Federal Register for Thursday, October 28, 2021, during National Lead Poisoning Prevention Week (October 25-29, 2021).

**DESCRIPTION of the ACTION**

OECA and OCSPP are withdrawing answers to two Frequently Asked Questions (FAQs) concerning property management companies (PMCs) and their compliance responsibilities under the TSCA Lead Renovation, Repair and Painting (RRP) Rule. This action explains the agency's prior basis for the FAQs, the rationale for their withdrawal now, and the circumstances under which PMCs are subject to the RRP Rule.

The RRP rule protects residents of pre-1978 homes—especially young children and pregnant mothers—from lead-based paint disturbed in the course of renovation, repair or painting activities. One of the FAQs to be withdrawn says that a PMC is not required to be RRP-certified by EPA if it hires a renovation firm for the renovation instead of using the PMC's own employees. The second FAQ says

that, in such a circumstance, EPA will exercise its discretion to bring enforcement against the renovation firm but not the PMC.

After a decade of implementing the RRP Rule with the two FAQs in place, EPA has learned from experience in the field that PMCs are commonly involved in renovations—even when they hire a separate renovation firm—and that these renovations often do not comply with the RRP Rule. For example, PMCs have used smaller, uncertified renovation firms and, as a result, contributed to non-compliance with the RRP rule in rental property managed by PMCs. The notice explains that even in instances where a PMC does hire a separate firm instead of using its own employees, the PMC may still perform certain elements of a renovation that obligate the PMC to comply with the RRP Rule, including to be certified and ensure the use of lead-safe work practices during the renovation. The notice provides concrete examples so that PMCs and the public better understand the PMCs' obligations.

EPA is not required to issue this notice or invite public comment because the FAQs are non-binding guidance. However, the agency is issuing the notice to inform regulated PMCs and the people who live in PMC-managed apartments of the PMCs' obligations under the RRP Rule. Providing a notice with a reasoned explanation for the withdrawal of the FAQs is also important for future OECA and DOJ enforcement actions. Absent the notice, PMCs could claim that EPA did not provide fair notice of a change in interpretation. It will also serve to show any reviewing courts that the agency had a reasoned explanation for its action.

More broadly, withdrawing the FAQs is important to EPA's ability to address lead-based paint in communities with environmental justice concerns. High concentrations of older, tenant-occupied housing – much of which is managed by PMCs – occur in communities with a high percentage of minority and low-income residents. Withdrawals will also help protect families living in 205,000 rental units of privatized military housing, of which 99% is managed by PMCs. EPA plans to hold both PMCs and the contractors they hire responsible for protecting residents.

#### **STAKEHOLDER INVOLVEMENT and ANTICIPATED RESPONSE**

Fourteen states and tribes implement EPA-authorized RRP programs. EPA implements the RRP program in all other areas. Since this is not a regulatory change, we do not anticipate a negative response from authorized programs. We did consult with regional offices who discussed this issue with several states that acknowledged the importance of holding PMCs responsible for compliance with the RRP Rule. We believe that public health groups, community groups (such as tenant associations), and environmental groups will be interested in this action because of the positive health and environmental benefits.

We also anticipate interest—and potentially a negative response—from property managers and property management companies. Many PMCs will need to seek firm certification (which costs \$300 for a five-year certification period) and take a more proactive approach to safety and compliance in their buildings. OECA and OCSPP are planning outreach to tenants through environmental groups and local community groups and to PMCs through several national associations. We will also be providing our regional partners with model compliance outreach letters to send to PMCs in their regions.

#### **INTERNAL DEVELOPMENT AND REVIEW PROCESS**

This action is not tiered and is not an ADP action because it is not regulatory. However, OECA and OCSPP engaged with regional ECAD and LCRD offices to assess the issue and the solution. OGC played an integral role in developing a legally defensible action. We also consulted with the members of

the Lead Steering Committee, including the Office of Children's Health Protection, and with DOJ practitioners who have brought or considered judicial enforcement actions against PMCs.

**INTERAGENCY REVIEW**

This action is not subject to OMB review or interagency consultation because it is not a regulatory action.

**RECOMMENDATION**

Michal and I recommend that you sign the attached notice of withdrawal.

Attachment

cc: Michal I. Freedhoff, Assistant Administrator, Office of Chemical Safety and Pollution Prevention





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

October 14, 2021

OFFICE OF  
AIR AND RADIATION

**MEMORANDUM**

**SUBJECT:** Final Rule: National Emission Standards for Hazardous Air Pollutants: Refractory Products Manufacturing Residual Risk and Technology Review (Tier 3; SAN 7527; RIN 2060-AU67) – **ACTION MEMORANDUM**

**FROM:** Joseph Goffman  
Principal Deputy Assistant Administrator (6101A)

**THRU:** Office of Policy (1803A)  
Office of Executive Secretariat (1105A)

**TO:** Michael S. Regan  
Administrator (1101A)

**PURPOSE**

Attached for your signature is the final rule addressing the residual risk and technology review (RTR) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Refractory Products Manufacturing. The NESHAP was promulgated in 2003 and the required RTR, due within 8 years of promulgation, has not been completed.

**DEADLINE**

The final rule for the Refractory Products Manufacturing NESHAP RTR is subject to a court-ordered deadline of November 1, 2021.

**OVERVIEW**

Facilities in the Refractory Products Manufacturing source category are subcategorized into four categories: clay refractory products, nonclay refractory products using organic HAP, chromium refractory products, and pitch-impregnated refractory products. This final action would apply to three refractory product manufacturing facilities that are in the clay and nonclay refractory products using organic HAP subcategories.

The 2003 Refractory Products Manufacturing NESHAP was projected to reduce total hazardous air pollutant (HAP) emissions by 137 tons per year. For clay refractory product manufacturers, the 2003 rule established a work practice standard to use natural gas as fuel to reduce acid gas and metal HAP emissions for existing sources and established emission limits for acid gases for new sources. For nonclay refractory product manufacturers using organic HAP, the 2003 rule

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established emission limits for new and existing nonclay refractory product manufacturers using organic HAP-containing binders. The 2003 rule also established a control device bypass provision for continuous kilns employed by nonclay refractory product manufacturers during scheduled maintenance periods.

*Risk Review.* For the risk review, we assessed the remaining risks due to emissions of HAP from existing facilities subject to the Refractory Products Manufacturing NESHAP. Facilities in this source category primarily emit hydrochloric acid and hydrofluoric acid and trace amounts of benzene, bis(2-ethylhexyl) phthalate and phenol. The results of the chronic inhalation cancer risk assessment indicated the maximum lifetime individual cancer risk to be less than 1-in-1 million, which we determined to be acceptable. We estimated maximum chronic noncancer risks and maximum acute noncancer risks to also be acceptable for the source category.

*Technology Review.* For the technology review, we evaluated the developments in practices, processes and control technologies to assess whether any further significant and cost-effective reduction in emissions could be achieved. We also considered revisions to the rule to address regulatory gaps in accordance with the 2020 D.C. Circuit Court's decision (*LEAN v. EPA*, 955 F. 3d.) decision where the court held that EPA has an obligation to set standards for unregulated emission sources and pollutants as part of technology reviews under Clean Air Act section 112(d)(6), as needed. As a result, we identified significant advances in the existing work practices that apply during the bypass and scheduled maintenance of organic HAP control devices for continuous kilns and we developed standards for previously unregulated HAP to address regulatory gaps. We did not have sufficient data to set numeric limits for organic HAP during periods of bypass and scheduled maintenance of organic HAP control devices for continuous kilns, so we strengthened the existing work practice standards based on the best practices of one facility in the source category. Improvements to the existing work practice includes: an annual limit on the number of hours for scheduled maintenance of the organic HAP control device, a limit on the mass fraction of organic HAP in the product manufactured for these periods, and a requirement to report the organic HAP emissions for these periods in the semiannual compliance report.

In this action, we are finalizing the proposed revisions to the rule: advances in the work practice provisions that apply during the bypass and scheduled maintenance of organic HAP control devices for continuous kilns; standards for previously unregulated HAP; and revision of the natural gas fuel requirement to use equivalent fuels only, including during periods of natural gas supply curtailment or interruption. The standards for previously unregulated HAP include numeric emission limits for particulate matter (PM), as a surrogate for non-mercury metal HAP, and numeric emission limits for mercury for affected sources in the clay subcategory and a work practice standard to use natural gas as fuel for nonclay refractories to control metal HAP emissions. We are finalizing the work practice standard to use natural gas as fuel for nonclay refractories to control metal HAP emissions because these HAP are not emitted in measurable quantities and we determined that the application of measurement methodology to these sources is not practicable.

*RTR Conclusions.* We conclude that the risk levels for this source category are acceptable and the existing standards protect public health with an ample margin of safety. As a result of the

technology review, we are finalizing improvements to the work practice standards that apply during scheduled maintenance of organic HAP control devices for continuous kilns based on the best practices of one facility in the source category. To address regulatory gaps in the existing standard for clay refractory product manufacturers, we are finalizing a numerical limit for PM as a surrogate for non-mercury metal HAP emissions and a numerical limit for mercury emissions based on measurable stack test data. For nonclay refractory product manufacturers, we are finalizing a work practice standard to use natural gas as fuel to control metal HAP emissions. We are also finalizing revision of the natural gas fuel requirement to use equivalent fuels only, including during periods of natural gas supply curtailment or interruption.

*Startup, Shutdown and Malfunction.* We are finalizing revisions to the rule to remove the startup, shutdown and malfunction (SSM) exemptions in accordance with the 2008 D.C. Circuit Court's vacatur of these provisions for 40 CFR part 63 NESHAP regulations. Discussions with the affected major source facility representatives identified no issues regarding compliance during periods of SSM.

*Additional Actions.* We are also finalizing additional changes to monitoring, recordkeeping and reporting requirements for electronic reporting of performance test results, notification of compliance status, and semiannual compliance reports, consistent with requirements of similar NESHAP.

## **ANTICIPATED PUBLIC AND STAKEHOLDER RESPONSE**

We worked directly with the three major source facilities to obtain information. We anticipate a favorable response from the facilities affected by the final metal HAP and mercury limits due to the minimal costs associated with the compliance testing requirements. We anticipate environmental groups will be partially satisfied with this action because we are removing the SSM exemptions and addressing regulatory gaps in the rule. However, they may object to EPA not setting numeric limits in place of two existing work practice standards and to the use of limited data sets.

## **INTERNAL DEVELOPMENT AND REVIEW PROCESS**

This proposed rule was developed under the Tier 3 rulemaking process and coordinated with OECA, OGC, OP and ORD. All internal comments have been addressed and changes, where appropriate, have been incorporated. OGC concurred with this rule on September 15, 2021.

## **INTERAGENCY REVIEW**

Under Executive Order 12866, OMB determined this proposed rule to be a "non-significant" regulatory action, and, therefore, it did not undergo interagency review.

## **IMPACTS**

Our cost impacts analysis indicates that the three major source facilities could meet the final standards without any additional add-on controls. The costs to comply with this final action are associated with performance testing, and recordkeeping and reporting. We estimate that the total cost to conduct performance tests for PM and mercury every 5 years would be \$115,300 for all facilities, and in the year in which the performance test is conducted, we estimate reporting costs of \$6,800 associated with the testing. We also estimate annual costs for visible emissions

monitoring of \$3,740 per stack per year, or \$22,400 per year for all facilities.

This action is not expected to disproportionately affect tribes or to have adverse impacts on children or minority communities.

#### **STAKEHOLDER INVOLVEMENT**

During the development of this action, EPA communicated extensively with the affected major source facilities to obtain necessary information. The facilities were cooperative despite reduced working schedules and alternate work locations due to impacts of the COVID-19 pandemic. We conferenced with each facility to verify existing data and obtain raw material and production data from the facilities to develop missing HAP emission estimates. The facilities also provided compliance test reports which provided data necessary to set limits for metal HAP and mercury.

#### **PEER REVIEW**

There were no influential or highly influential products supporting this action as defined by the agency's *Peer Review Handbook*.

#### **RECOMMENDATION**

OAR recommends that you sign the attached final rule for publication in the *Federal Register*.

Attachment

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 63**

**[EPA-HQ-OAR-2020-0148; FRL-7527-02-OAR]**

**RIN 2060-AU67**

**National Emission Standards for Hazardous Air Pollutants: Refractory Products**

**Manufacturing Residual Risk and Technology Review**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** This action finalizes the residual risk and technology review (RTR) conducted for the Refractory Products Manufacturing source category regulated under national emission standards for hazardous air pollutants (NESHAP). The Environmental Protection Agency (EPA) found the risks due to emissions of air toxics from this source category to be acceptable and that the standards provide an ample margin of safety to protect public health. As a result, the Agency is making no revisions to the emission limits for this source category based on the residual risk. In our technology review, after reviewing developments in practices, processes, and control technologies, the EPA determined that no revisions to the numeric emission limits is necessary. However, the EPA is revising certain work practice provisions based on the technology review. These final amendments also include new provisions for certain hazardous air pollutants (HAP) and a revision of the alternative fuel provisions. In addition, the Agency is taking final action on the proposed amendments for the source category to address emissions during periods of startup, shutdown, and malfunction (SSM); emissions during periods of scheduled maintenance;

electronic reporting of notification of compliance status (NOCS) reports, performance test results, and performance evaluation results; the addition of test methods and guidance materials; updates to several test methods; and other miscellaneous clarifying and technical corrections.

**DATES:** This final rule is effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The incorporation by reference (IBR) of certain publications listed in the rule is approved by the Director of the *Federal Register* as of **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** The U.S. Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA-HQ-OAR-2020-0148. All documents in the docket are listed on the <https://www.regulations.gov/> website. Although listed, some information is not publicly available, *e.g.*, Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <https://www.regulations.gov/>, or in hard copy at the EPA Docket Center, WJC West Building, Room Number 3334, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** For questions about this final action, contact Ms. Paula Deselich Hirtz, Minerals and Manufacturing Group, Sector Policies and Programs Division (D243-04), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919)

541–2618; fax number: (919) 541-4991; and email address: *hirtz.paula@epa.gov*. For specific information regarding the risk modeling methodology, contact Mr. Chris Sarsony, Health and Environmental Impacts Division (C539-02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–4843; fax number: (919) 541–0840; and email address: *sarsony.chris@epa.gov*.

# **SUPPLEMENTARY INFORMATION:**

*Preamble acronyms and abbreviations.* The Agency uses multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms below. Also, throughout this preamble the terms “we,” “us,” or “our” mean the EPA.

BLD	bag leak detection
CAA	Clean Air Act
CRA	Congressional Review Act
CDX	Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting Interface
EJ	Environmental Justice
EPA	Environmental Protection Agency
ERT	Electronic Reporting Tool
FTIR	Fourier Transform Infrared
HAP	hazardous air pollutants(s)
HQ	hazard quotient
IBR	incorporation by reference
ICR	Information Collection Request
lb/hr	pounds per hour
MACT	maximum achievable control technology
HCl	hydrogen chloride
HF	hydrogen fluoride
Hg	mercury
MIR	maximum individual risk
NAAQS	National Ambient Air Quality Standards
NACWA	National Association of Clean Water Agencies

NEI	National Emission Inventory
NESHAP	national emission standards for hazardous air pollutants
NOCS	notification of compliance status
OM&M	operation, maintenance, and monitoring
OPL	operating parameter limit
PDF	portable document format
PM	Particulate matter
POM	polycyclic organic matter
ppmvd	per million by volume, dry basis
RFA	Regulatory Flexibility Act
RTO	regenerative thermal oxidizer
RTR	risk and technology review
SSI	Sewage Sludge Incinerator
SSM	startup, shutdown, and malfunction
THC	total hydrocarbons
tpy	tons per year
TOSHI	target organ specific hazard index
UMRA	Unfunded Mandates Reform Act
µg/dscm	micrograms per dry standard cubic meter
µg/Nm <sup>3</sup>	micrograms per normal cubic meter
UPL	upper prediction limit
VCS	voluntary consensus standards
VE	visible emissions
XML	extensible markup language

*Background information.* On January 14, 2021, the EPA proposed revisions to the Refractory Manufacturing Products NESHAP based on our RTR (86 FR 3095, January 14, 2021). In this action, we are finalizing decisions and revisions for the rule. We summarize some of the more significant comments we timely received regarding the proposed rule and provide our responses in this preamble. A summary of all other public comments on the proposal and the EPA's responses to those comments is available in the document titled *Summary of Public Comments and Responses on Proposed Rule: National Emission Standards for HAP from Refractory Products Manufacturing (40 CFR part 63, subpart SSSSS) Residual Risk and Technology Review, Final Amendments*, located in Docket ID No. EPA-HQ-OAR-2020-0148. A



“track changes” version of the regulatory language that incorporates the changes in this action is available in the docket.

*Organization of this document.* The information in this preamble is organized as follows:

I. General Information

- A. Does this action apply to me?
- B. Where can I get a copy of this document and other related information?
- C. Judicial Review and Administrative Reconsideration

II. Background

- A. What is the statutory authority for this action?
- B. What is the Refractory Products Manufacturing source category and how does the NESHAP regulate HAP emissions from the source category?
- C. What changes did we propose for the Refractory Products Manufacturing source category in our January 14, 2021 RTR proposal?

III. What is included in this final rule?

- A. What are the final rule amendments based on the risk review for the Refractory Products Manufacturing source category?
- B. What are the final rule amendments based on the technology review for the Refractory Products Manufacturing source category?
- C. What are the final rule amendments pursuant to CAA sections 112(d)(2) and (3) for the Refractory Products Manufacturing source category?
- D. What are the final rule amendments addressing emissions during periods of startup, shutdown, and malfunction (SSM)?
- E. What other changes have been made to the NESHAP?
- F. What are the effective and compliance dates of the standards?

IV. What is the rationale for our final decisions and amendments for the Refractory Products Manufacturing source category?

- A. Residual Risk Review for the Refractory Products Manufacturing Source Category
  - B. Technology Review for the Refractory Products Manufacturing Source Category
  - C. CAA Sections 112(d)(2) and (3) Amendments for the Refractory Products Manufacturing Source Category
  - D. SSM Amendments for the Refractory Products Manufacturing Source Category
  - E. Electronic Reporting Amendments for the Refractory Products Manufacturing Source Category
  - F. Technical Amendments for the Refractory Products Manufacturing Source Category
- V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted

- A. What are the affected facilities?
- B. What are the air quality impacts?
- C. What are the cost impacts?
- D. What are the economic impacts?
- E. What are the benefits?
- F. What analysis of environmental justice did we conduct?
- G. What analysis of children’s environmental health did we conduct?

VI. Statutory and Executive Order Reviews

A. Executive Orders 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

B. Paperwork Reduction Act (PRA)

C. Regulatory Flexibility Act (RFA)

D. Unfunded Mandates Reform Act (UMRA)

E. Executive Order 13132: Federalism

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

I. National Technology Transfer and Advancement Act and 1 CFR Part 51

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

K. Congressional Review Act (CRA)

**I. General Information**

*A. Does this action apply to me?*

*Regulated entities.* Refractory Products Manufacturing, the source category that is the subject of this final action, is regulated under 40 CFR part 63, subpart SSSSS. The North American Industry Classification System codes for the refractory products industry are 327124 (clay) and 327125 (nonclay). We estimate that three major source facilities engaged in refractory products manufacturing will be affected by this final rule. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section of this preamble.

*B. Where can I get a copy of this document and other related information?*

In addition to being available in the docket, an electronic copy of this final action will also be available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: <https://www.epa.gov/stationary-sources-air->

*pollution/refractory-products-manufacturing-national-emissions-standards*. Following publication in the *Federal Register*, the EPA will post the *Federal Register* version and key technical documents at this same website.

Additional information is available on the RTR website at <https://www.epa.gov/stationary-sources-air-pollution/risk-and-technology-review-national-emissions-standards-hazardous>. This information includes an overview of the RTR program and links to project websites for the RTR source categories.

### *C. Judicial Review and Administrative Reconsideration*

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (the Court) by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, WJC South

Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

## **II. Background**

### *A. What is the statutory authority for this action?*

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of HAP from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. “Major sources” are those that emit, or have the potential to emit, any single HAP at a rate of 10 tons per year (tpy) or more, or 25 tpy or more of any combination of HAP. For major sources, these standards are commonly referred to as maximum achievable control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems, or techniques, including, but not limited to, those that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials, or other modifications; enclose systems or processes to eliminate emissions; collect, capture, or treat HAP when released from a process, stack, storage, or fugitive emissions point; are design, equipment, work practice, or operational standards; or any combination of the above.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements, and which may not be based

on cost considerations. See CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them “as necessary (taking into account developments in practices, processes, and control technologies)” no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise

the MACT standards pursuant to CAA section 112(f).<sup>1</sup> For more information on the statutory authority for this rule, see 86 FR 3097 (January 14, 2021).

*B. What is the Refractory Products Manufacturing source category and how does the NESHAP regulate HAP emissions from the source category?*

The EPA promulgated the Refractory Products Manufacturing NESHAP on April 16, 2003 (68 FR 18730). The standards are codified at 40 CFR part 63, subpart SSSSS. The Refractory Products Manufacturing industry consists of facilities that manufacture refractory products, such as refractory bricks, refractory shapes, monolithics, kiln furniture, crucibles, and other materials used for lining furnaces and other high temperature process units. The source category covered by this NESHAP includes three major source facilities.

The NESHAP groups refractory product manufacturing processes into four subcategories: clay refractories, nonclay refractories, chromium refractories (nonclay) and pitch-impregnated refractories (nonclay). The three major source facilities manufacture clay and/or nonclay refractory products and can be grouped into the clay and nonclay refractories subcategories. Chromium refractory products and pitch-impregnated refractory products are not manufactured by any of the three major source facilities.

The Refractory Products Manufacturing NESHAP specifies emission limits, operating limits, and work practice standards for existing affected thermal process units and for new and reconstructed affected thermal process units that emit organic HAP according to refractory product type. For existing clay refractory product kilns, the NESHAP requires the use of natural

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<sup>1</sup> The Court has affirmed this approach of implementing CAA section 112(f)(2)(A): *NRDC v. EPA*, 529 F.3d 1077, 1083 (D.C. Cir. 2008) (“If EPA determines that the existing technology-based standards provide an ‘ample margin of safety,’ then the Agency is free to readopt those standards during the residual risk rulemaking.”).

gas or equivalent fuel at all times, except during periods of natural gas supply interruption or curtailment, to limit metal HAP, hydrogen fluoride (HF) and hydrogen chloride (HCl) emissions. New clay refractory product kilns are required to meet numeric limits for HF and HCl. For existing and new curing ovens, shape dryers, and kilns that are used to process refractory products that use organic HAP (*i.e.*, nonclay refractory product sources), the NESHAP provides the option of meeting a total hydrocarbon (THC) concentration limit or reducing the THC mass emissions by at least 95 percent. The NESHAP also establishes operating limits for thermal process sources and control devices, which are based on operating parameters established during performance testing. Additional detail on the refractory product manufacturing source category and NESHAP requirements are provided in the proposal preamble (86 FR 3083, January 14, 2021).

*C. What changes did we propose for the Refractory Products Manufacturing source category in our January 14, 2021 RTR proposal?*

On January 14, 2021, the EPA published a proposed rule in the *Federal Register* for the Refractory Products Manufacturing NESHAP, 40 CFR part 63, subpart SSSSS, that took into consideration the RTR analyses (86 FR 3095). For this source category, we proposed that the risks are acceptable, and that additional emission controls are not necessary to provide an ample margin of safety. For the technology review, we proposed improvements to the existing work practice standard for affected continuous kilns using THC emission control devices. We also proposed the following amendments: standards for previously unregulated HAP for affected sources in the clay and nonclay refractory subcategories; the requirement that NOCS reports, performance test results, and performance evaluation results be electronically submitted;

revisions to the SSM provisions of the rule; new test methods and incorporation by reference (IBR) of alternative test methods; and other minor technical and editorial revisions.

### **III. What is included in this final rule?**

This action finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for the Refractory Products Manufacturing source category and amends the Refractory Products Manufacturing NESHAP based on those determinations. This action also finalizes other changes to the NESHAP, including the proposed changes described above, except we are finalizing a slightly modified version of the proposed work practice standard for affected continuous kilns using THC emission control devices, as explained in section IV.B.2 of this preamble; and we are not finalizing the proposed allowance to use alternative fuels during periods of natural gas supply curtailment or interruption from the natural gas fuel requirement, as explained in section IV.B.3 of this preamble. We are finalizing these requirements as a result of the public comments we received on the proposed rule.

#### *A. What are the final rule amendments based on the risk review for the Refractory Products Manufacturing source category?*

This section describes the final amendments to the Refractory Products Manufacturing NESHAP (subpart SSSSS) being promulgated pursuant to CAA section 112(f). In this action, we are finalizing our proposed determination that risks from the Refractory Products Manufacturing source category are acceptable, the standards provide an ample margin of safety to protect public health, and additional standards are not necessary to prevent an adverse environmental effect. The EPA proposed no changes to the subpart based on the risk review conducted pursuant to CAA section 112(f). The EPA received no new data or other information during the comment period that would cause us to change our proposed risk determination. Therefore, we are not



requiring additional controls or new requirements under CAA section 112(f)(2) for subpart SSSSS in this action.

*B. What are the final rule amendments based on the technology review for the Refractory Products Manufacturing source category?*

We determined that there was a development in practice that warranted revision of the MACT standards for this source category. Therefore, to satisfy the requirements of CAA section 112(d)(6), we proposed revisions to the MACT standards to improve the existing work practice standard for affected continuous kilns using emission control devices. The proposed revisions were based on the best practices of one facility and included:

- limitation of the work practice standard to THC emission control devices only,
- an annual limit on the number of hours for bypass of the control device,
- the requirement to process product containing lower percentages of organic HAP content in the resins, binders and additives (less than the average organic HAP mass fraction),
- an allowance for the processing of five kiln cars per year with greater than average organic HAP mass fraction, and
- reporting of the mass of organic HAP emissions for bypass periods in the semi-annual compliance report.

The EPA received additional data during the comment period that caused us to change these proposed work practice requirements. Therefore, in this action, we are finalizing the following requirements under CAA section 112(d)(6) for subpart SSSSS:

- the proposed limitation of the work practice standard to THC emission control devices only,
- the proposed annual limit on the number of hours for bypass of the control device,

- revised requirement to maintain the organic HAP processing rate below whichever is lower, either a) the average organic HAP processing rate (*i.e.*, the average organic HAP processing rate (pounds per hour (lb/hr)) based on actual production on a 6-month rolling basis, not to include periods of kiln shut down) or b) the lowest hourly organic HAP processing rate determined during the most recent performance test,
- removal of the proposed allowance for processing of five kiln cars per year with greater than average organic HAP mass fraction during control device maintenance and bypass,
- revised reporting requirements for the semi-annual compliance report, including:
  - the average organic HAP processing rate based on actual production on a 6-month rolling basis (not to include periods of kiln shut down) or the lowest hourly organic HAP processing rate from the most recent performance test (whichever is lower), for bypass periods,
  - the actual organic HAP processing rate,
  - the amount of product produced and the mass of organic HAP in the product produced,
  - the estimated THC emissions,
  - the number of hours the control device was bypassed during the compliance period, and
  - the cumulative number of hours the control device was bypassed over the last 12-month rolling period.

We are not finalizing the proposed allowance for processing of five kiln cars per year with greater than average organic HAP mass fraction during control device maintenance and bypass. For more information regarding the final improvements to the work practice standard

that applies for continuous kilns with THC emissions control devices, see section IV.B of this preamble.

In addition, the EPA received a comment during the comment period that caused us to review the fuel combustion technology used by sources in the source category and consequently revise the existing work practice standard to require the use of natural gas (or equivalent fuel) at all times. After consideration of the comment, under CAA section 112(d)(6), we are removing the allowance to use alternative fuels during periods of natural gas supply curtailment or interruption from the natural gas fuel requirement as explained in section IV.B.3 of this preamble. This finalized amendment applies to existing clay refractory products kilns and new or existing chromium refractory products kilns and reflects a development in our understanding of refractory kiln fuel combustion technology since promulgation of the original standard.

Finally, as part of the technology review, we identified regulatory gaps (previously unregulated processes or pollutants) and are establishing new standards to fill those gaps as described in section III.C of this preamble.

*C. What are the final rule amendments pursuant to CAA sections 112(d)(2) and (3) for the Refractory Products Manufacturing source category?*

We determined that there are previously unregulated HAP for existing sources in the clay and nonclay refractory subcategories that warrant revisions to the MACT standards for this source category. Therefore, pursuant to the requirements of CAA section 112(d)(2) and (3) we proposed revisions to the MACT standards to include the following:

- new emission limits for particulate matter (PM) as a surrogate for non-mercury (non-Hg) metal HAP and mercury (Hg) for existing clay refractory product kilns, and

- the requirement to use natural gas as fuel, or an equivalent fuel, as the kiln fuel for new and existing curing ovens, shape dryers, and kilns that are used to process refractory products that use organic HAP (*i.e.*, nonclay refractory product sources), except during periods of natural gas supply interruption or curtailment.

As noted in section III.B of this preamble, the EPA received a comment during the comment period that caused us to review the fuel combustion technology used for all refractory products sources in the source category. Based on that review, we are not finalizing the proposed allowance to use alternative fuels during periods of natural gas supply interruption or curtailment from the natural gas fuel requirement for new and existing nonclay sources. Therefore, we are finalizing the new emission limits for PM (as a surrogate for non-Hg metal HAP) and Hg for existing clay refractory product kilns, as proposed, and we are finalizing a revised requirement to use natural gas, or an equivalent fuel, as the fuel for new and existing nonclay sources, as a result of comments, under CAA section 112(d)(2) and (3) for subpart SSSSS in this action.

*D. What are the final rule amendments addressing emissions during periods of startup, shutdown, and malfunction?*

We are finalizing the proposed amendments to the Refractory Products Manufacturing NESHAP to eliminate the SSM exemption. Consistent with *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008), the EPA is establishing standards in these rules that apply at all times. As detailed in section IV.E of the proposal preamble (86 FR 3099, January 14, 2021), Table 11 to subpart SSSSS of part 63 (General Provisions applicability table) is being revised to change several references related to the provisions that apply during periods of SSM. We also eliminated or revised certain recordkeeping and reporting requirements related to the eliminated SSM exemption. The EPA also made other harmonizing changes to remove or modify inappropriate,

unnecessary, or redundant language in the absence of the SSM exemption. We determined that facilities in this source category can meet the applicable emission standards at all times, including periods of startup and shutdown. Therefore, the EPA determined that no additional standards are needed to address emissions during these periods. The legal rationale and explanation of the changes for SSM periods are set forth in the proposed rule. See 86 FR 3079, 3099-3102. Further, the EPA did not propose and is not promulgating standards for malfunctions in this final action. As discussed in section IV.E of the January 14, 2021, proposal preamble, the EPA interprets CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards, although the EPA has the discretion to set standards for malfunctions where feasible. For the Refractory Products Manufacturing source category, it is unlikely that a malfunction would result in a violation of the standards, and no comments or information were submitted during the comment period that support a contrary conclusion. Refer to section IV.E of the January 14, 2021 proposal preamble for further discussion of the EPA's rationale for the decision not to set standards for malfunction events, as well as a discussion of the actions a source could take in the unlikely event that a source fails to comply with the applicable CAA section 112(d) standards as a result of a malfunction event, given that administrative and judicial procedures for addressing exceedances of the standards fully recognize that violations may occur despite good faith efforts to comply.

*E. What other changes have been made to the NESHAP?*

In addition to the changes described above we are finalizing other proposed amendments for the Refractory Products Manufacturing NESHAP related to electronic reporting, test methods and minor technical and editorial revisions, as described below.

To increase the ease and efficiency of data submittal and data accessibility, we are finalizing the proposed requirement that owners and operators of facilities in the Refractory Products Manufacturing source category submit electronic copies of required NOCS reports, performance test results, and performance evaluation results through the EPA's Central Data Exchange (CDX) web site using an electronic performance test report tool called the Electronic Reporting Tool (ERT). We also are finalizing, as proposed, provisions that allow facility operators the ability to seek extensions for submitting electronic reports for circumstances beyond the control of the facility, *i.e.*, for a possible outage in the CDX or Compliance and Emissions Data Reporting Interface (CEDRI) or for a *force majeure* event in the time just prior to a report's due date, as well as the process to assert such a claim.

We are also finalizing the proposed additional and updated test methods and an EPA guidance document that are incorporated by reference. In accordance with requirements of 1 CFR 51.5, the EPA is incorporating by reference the following documents described in the amendments to 40 CFR 63.14:

- ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], issued August 31, 1981, IBR approved for Table 4 to subpart SSSSS.
- ASTM D6348-12e1, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, Approved February 1, 2012, IBR approved for Table 4 to subpart SSSSS.
- ASTM D6784-16, "Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)," (Approved March 1, 2016), IBR approved for Table 4 to subpart SSSSS.

- EPA-454/R-98-015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997, IBR approved for 40 CFR 63.9804(f)(1). This document provides guidance on the use of triboelectric monitors as fabric filter bag leak detectors.

In addition, we are finalizing the following proposed technical and editorial corrections:

- Revise 40 CFR 63.9824 and Table 4 to subpart SSSSS of part 63 to clarify the location in 40 CFR part 60 of applicable EPA test methods; and
- Revise 40 CFR 63.9814 and 63.9816 to include the requirements to record and report information on failures to meet the applicable standard.

Finally, although not addressed in the proposal, we are amending 40 CFR 63.9804(e)(1) to correct a spelling error.

*F. What are the effective and compliance dates of the standards?*

The revisions to the MACT standards for the Refractory Products Manufacturing source category being promulgated in this action are effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. New sources must comply with all of the standards immediately upon the effective date of the standard, **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, or upon startup, whichever is later.

The compliance dates for existing affected sources are listed below. Existing affected sources must continue to meet the current requirements of 40 CFR part 63, subpart SSSSS, until the applicable compliance date.

The compliance date for existing affected nonclay sources to comply with the work practice to use natural gas as fuel, or an equivalent fuel, as the kiln fuel at all times, including periods of natural gas supply interruption or curtailment is **[INSERT DATE OF**

**PUBLICATION IN THE FEDERAL REGISTER]**. The compliance date for existing affected sources to comply with the electronic reporting requirement for NOCS reports, performance test results, and performance evaluation results is **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The compliance date for existing affected sources with continuous kilns using THC emission control devices to comply with the amended work practice standards (*i.e.*, limit the total number of hours for bypass of the control device for during scheduled maintenance to 750 hours per year per kiln; maintain the organic HAP processing rate below the average rate based on production or below the lowest hourly rate during the most recent performance test, whichever is lower; update the operation, maintenance, and monitoring (OM&M) plan; include the required information in the semi-annual compliance report) is **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The compliance date for existing affected clay refractory product kilns to comply with the new limits for PM (as a surrogate for non-Hg metal HAP) and Hg is **[INSERT DATE 1 YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The compliance date for existing affected sources to comply with the SSM revisions, in accordance with the SSM court decision, is **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

We determined that an immediate compliance date is practicable for the natural gas requirement and is based on current practices and other information provided by the facilities. We are finalizing the 181-day compliance date for electronic reporting and the scheduled maintenance work practice to require facilities to implement these changes as expeditiously as practicable. For electronic reporting, our experience with similar industries that are required to convert reporting mechanisms to install necessary hardware and software, become familiar with



the process of submitting performance test results electronically through the EPA's CEDRI, test these new electronic submission capabilities, and reliably employ electronic reporting shows that a time period of a minimum of 90 days, and, more typically, 180 days, is generally necessary to successfully accomplish these revisions. For the improved scheduled maintenance work practice, we expect facilities would also need this time to seek approval from the Administrator before taking the control device on the affected kiln out of service for scheduled maintenance and update their operation, maintenance, and monitoring plan to reflect the revised requirements. For the new PM (as a surrogate for non-Hg metal HAP) and Hg requirements, we determined the one-year compliance date would provide existing clay sources with sufficient time to plan and schedule facility resources to meet the notification and compliance demonstration testing requirements associated with the new limits. For the SSM changes, excluding the revised requirements for the SSM described above (40 CFR 63.6(f)(1)), our experience with similar industries further shows that this sort of regulated facility generally requires a time period of 181 days to read and understand the amended rule requirements and make any necessary operational adjustments, adjustments to recordkeeping and reporting systems, and/or updates to OM&M plans to reflect the revised requirements.

During proposal we requested information from sources in this source category regarding specific actions that would need to be undertaken to comply with the proposed amended requirements and the time needed to make the adjustments for compliance with any of the revised requirements. No comments or information were submitted during the comment period that support a contrary conclusion; therefore, we are finalizing these compliance dates as proposed.

#### **IV. What is the rationale for our final decisions and amendments for the Refractory Products Manufacturing source category?**

For each issue, this section provides a description of what we proposed and what we are finalizing for the issue, the EPA's rationale for the final decisions and amendments, and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document, *Summary of Public Comments and Responses on Proposed Rule: National Emission Standards for HAP for Refractory Products Manufacturing (40 CFR part 63, subpart SSSSS), Residual Risk and Technology Review, Final Amendments*, available in the docket.

##### *A. Residual Risk Review for the Refractory Products Manufacturing Source Category*

##### **1. What did we propose pursuant to CAA section 112(f) for the Refractory Products Manufacturing source category?**

Pursuant to CAA section 112(f), the EPA conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in section IV.B of the proposed rule preamble (86 FR 3095, January 14, 2021). The results of this review are presented briefly below in Table 1 of this preamble.

Additional detail is provided in the residual risk technical support document titled, *Residual Risk Assessment for the Refractory Products Manufacturing Source Category in Support of the 2020 Risk and Technology Review Proposed Rule*, which is available in the Refractory Products Manufacturing docket (Docket Item No. EPA-HQ-OAR-2020-0148-0013).

**TABLE 1. REFRACTORY PRODUCTS MANUFACTURING SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS**

<b>Risk Assessment</b>	<b>Maximum Individual Cancer Risk (in 1 million)</b>	<b>Estimated Population at Increased Risk of Cancer <math>\geq</math> 1-in-1 Million</b>	<b>Estimated Annual Cancer Incidence (cases per year)</b>	<b>Maximum Chronic Noncancer Target Organ Specific Hazard Index (TOSHI)<sup>1</sup></b>	<b>Maximum Screening Acute Noncancer HQ<sup>2</sup></b>

	<b>Based on Actual Emissions</b>	<b>Based on Allowable Emissions</b>	<b>Based on Actual Emissions</b>	<b>Based on Allowable Emissions</b>	<b>Based on Actual Emissions</b>	<b>Based on Allowable Emissions</b>	<b>Based on Actual Emissions</b>	<b>Based on Allowable Emissions</b>	<b>Based on Actual Emissions</b>
Source Category	0.7	0.7	0	0	0.0003	0.0003	0.04	0.04	HQREL = 0.09
Whole Facility	0.7	-	0	-	0.0004	-	0.04	-	-

1 The TOSHI is the sum of the chronic noncancer hazard quotients (HQ) for substances that affect the same target organ or organ system.

2 The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop HQ values.

The results of the proposed inhalation risk modeling, as shown in Table 1 of this preamble, indicate that the maximum individual cancer risk based on actual and allowable emissions (lifetime) is 0.7-in-1 million (driven by trace amounts of chromium, arsenic, nickel and cadmium emissions from tunnel kilns), the maximum chronic noncancer TOSHI value based on actual and allowable emissions is 0.04 (driven by HF from tunnel kilns), and the maximum screening acute noncancer HQ value (off-facility site) is 0.09 (driven by HF). At proposal, the total annual cancer incidence (national) from these facilities based on actual and allowable emission levels was estimated to be 0.0003 excess cancer cases per year or one case every 3,333 years. The maximum individual cancer risk (lifetime) for the whole facility was determined to be 0.7-in-1 million at proposal, driven by chromium, arsenic, nickel and cadmium emissions from tunnel kilns. The total estimated cancer incidence from the whole facility was determined to be 0.0004 excess cancer cases per year, or one excess case in every 2,500 years. No people were estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources at the three facilities in this source category. The maximum facility-wide TOSHI for the source category was estimated to be 0.04, driven by HF emissions from tunnel kilns.

We also evaluated multipathway human health risk from the five PB-HAP that are emitted by sources within this source category (arsenic, cadmium, POM, Hg (divalent Hg and methyl mercury), and lead). We evaluated the cadmium emissions from these facilities and concluded this HAP did not exceed the Tier 1 multipathway screening value of 1 for cancer or noncancer. We also evaluated the arsenic, methyl mercury, and POM emissions and found these HAP caused an exceedance of the Tier 1 multipathway screening value of 1 for cancer. Therefore, we conducted a Tier 2 screening assessment for these HAP and concluded that emissions of arsenic, POM and methyl mercury from these facilities did not exceed the Tier 2 multipathway screening value of 1 for cancer. A Tier 2 noncancer screening assessment was also conducted for Hg emissions and resulted in a screening value less than 1. Based upon the results of the screening assessments no further screening or site-specific assessments were conducted for this source category.

In evaluating the potential for multipathway effects from emissions of lead, modeled maximum annual-average lead concentrations were compared to the National Ambient Air Quality Standards (NAAQS) for lead ( $0.15 \mu\text{g}/\text{m}^3$ ). Results of this analysis confirmed that the NAAQS for lead would not be exceeded by any facility.

To evaluate the potential for adverse environmental effects, the EPA focuses on eight HAP, which are referred to as “environmental HAP,” in its screening assessment: six PB-HAP and two acid gases. The PB-HAP emitted by sources in the category are arsenic compounds, cadmium compounds, POM, mercury (both inorganic mercury and methyl mercury), and lead compounds. The acid gases included in the screening assessment and emitted from the category are HCl and HF. In the Tier 1 screening analysis for PB-HAP (other than lead, which was evaluated differently), arsenic, cadmium, divalent mercury, and POM had no Tier 1 exceedances

for any ecological benchmark. Methyl mercury emissions at one facility had a Tier 1 exceedance for the surface soil no-observed-adverse-effect-level (avian ground insectivores) by a maximum SV of 2. A Tier 2 screening assessment was performed for methyl mercury. Methyl mercury had no Tier 2 exceedances for any ecological benchmark. For lead, we did not estimate any exceedances of the secondary lead NAAQS.

Two acid gases are emitted by sources within this source category: HCl HF. We conducted a screening-level evaluation of the potential adverse environmental effects associated with emissions of HCl and HF and found that the average modeled concentration around each facility (*i.e.*, the average concentration of all off-site data points in the modeling domain) did not exceed any ecological benchmark. In addition, each individual modeled concentration of HCl (*i.e.*, each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. For HF, the maximum facility screening value (based on the average concentration of all off-site data points over the modeling domain) was well below 1 (0.007) and the maximum area that exceeded the ecological benchmark was only 0.002-percent of the modeled area. Based on the results of the environmental risk screening evaluation, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

We weighed all health risk factors, including those shown in Table 1 of this preamble, in our risk acceptability determination and proposed that the residual risks from the Refractory Products Manufacturing source category are acceptable (section IV.C of the proposed rule preamble, 86 FR 3095, January 14, 2021). We then considered whether 40 CFR part 63, subpart SSSSS provides an ample margin of safety to protect public health and prevents, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. At proposal we determined there are no individuals in the exposed population with lifetime

cancer risks above 1-in-1 million as a result of actual or allowable emissions from this category. In addition, in our risk analysis we did not identify a potential for adverse chronic noncancer, acute noncancer, or multipathway health effects. Therefore, we proposed the current standards provide an ample margin of safety to protect public health (section IV.C of the proposed rule preamble, 86 FR 3095, January 14, 2021).

2. How did the risk review change for the Refractory Products Manufacturing source category?

We have not changed any aspect of the risk assessment for this source category as a result of public comments received on the January 2021 proposal.

3. What key comments did we receive on the risk review, and what are our responses?

We received comments in support of and against the proposed residual risk review. Having carefully considered these comments, it is our determination that no revisions are warranted under CAA section 112(f)(2) for the Refractory Products Manufacturing source category. Generally, the comments that were not supportive of the risk review determination suggested changes to the underlying risk assessment methodology. For example, one commenter stated that the EPA should account for the increased risks due to exposure to multiple sources of HAP, use more health-protective dose-response values, and consider increased risks in childhood and from prenatal exposure. After review of all the comments received, we determined that no changes to our Science Advisory Board-approved review process were necessary. The comments and our specific responses can be found in the document, *Summary of Public Comments and Responses on Proposed Rule: National Emission Standards for HAP for Refractory Products Manufacturing (40 CFR part 63, subpart SSSSS), Residual Risk and Technology Review, Final Amendments*, available in the docket for this action (Docket ID No. EPA-HQ-OAR-2020-0148).

4. What is the rationale for our final approach and final decisions for the risk review?

As noted in our proposal, the EPA sets standards under CAA section 112(f)(2) using “a two-step standard-setting approach, with an analytical first step to determine an ‘acceptable risk’ that considers all health information, including risk estimation uncertainty, and includes a presumptive limit on the maximum individual risk (MIR) of “approximately 1-in-10 thousand” (see 54 FR 38045, September 14, 1989). We weigh all health risk factors in our risk acceptability determination, including the cancer MIR, cancer incidence, the maximum cancer TOSHI, the maximum acute noncancer HQ, the extent of noncancer risks, the distribution of cancer and noncancer risks in the exposed population, and the risk estimation uncertainties.

Since proposal, neither the risk assessment nor our determinations regarding risk acceptability, ample margin of safety, or adverse environmental effects have changed. For the reasons explained in the proposed rule, we have determined that the risks from the Refractory Products Manufacturing source category are acceptable, and that the current standards provide an ample margin of safety to protect public health and prevent an adverse environmental effect. Therefore, we are not revising the subpart to require additional controls pursuant to CAA section 112(f)(2) based on the residual risk review, and we are readopting the existing standards under CAA section 112(f)(2).

*B. Technology Review for the Refractory Products Manufacturing Source Category*

1. What did we propose pursuant to CAA section 112(d)(6) for the Refractory Products Manufacturing source category?

Based on our technology review, we proposed improvements to the existing underlying work practices as required by CAA section 112(d)(6) during scheduled maintenance of THC control devices. These revisions are necessary to reflect technical developments in pollution

control practices since the promulgation of the original standard for this source category and reflect the best practices of one affected facility. Specifically, for affected continuous kilns using THC emission control devices, we proposed to limit the number of hours for bypass of the control device to conduct scheduled maintenance, schedule the manufacture of product with binder applicability of the standard to THC emission control devices, limit the number of hours for percentages at the lower end of the range produced during periods of control device bypass. We also proposed to include the THC emissions for these periods in the semi-annual compliance report. A brief summary of the EPA's findings in conducting the technology review of refractory products manufacturing operations was included in the preamble to the proposed rule (86 FR 3095, January 14, 2021), and a detailed discussion of the EPA's technology review and findings was included in the memorandum, *Technology Review for the Refractory Products Manufacturing NESHAP*, available in the docket for this action (Docket Item No. EPA-HQ-OAR-2020-0148-0008).

2. How did the technology review change for the Refractory Products Manufacturing source category?

For the final rule, we revised aspects of two work practice standards from the proposal, based on public comments. First, we are finalizing slightly different improvements than proposed for the work practice standard that applies when a continuous kiln THC control device is bypassed for scheduled maintenance. In particular, to demonstrate compliance with the requirement in 40 CFR 63.9792(e)(2) to minimize HAP emissions during the period when the kiln is operating and the control device is out of service, the owner or operator will be required to maintain the organic HAP processing rate (lb/hr) below either the average organic HAP processing rate based on the actual production on a 6-month rolling basis (not to include periods



of kiln shut down) or the HAP processing rate (lb/hr) that coincides with the lowest hour of the most recent 3-hour performance test, whichever is lower. This requirement replaces the proposed limitation of five kiln cars with products for which the mass fraction of organic HAP in the resins, binders, and additives is greater than the average for the year. Second, we are revising the work practice standard to use natural gas, or equivalent, as the kiln fuel by removing the exception for periods of natural gas curtailment or supply interruption.

3. What key comments did we receive on the technology review, and what are our responses?

We received both supportive and adverse comments on various aspects of our technology review for refractory products manufacturing. The key comments and responses are provided in this section; summaries of comments not discussed in this preamble and the EPA's responses can be found in the comment summary and response document, available in the docket.

*Comment:* One commenter provided technical comments on the specific provisions that the EPA proposed to limit production during periods when the THC control device is being bypassed for maintenance. The proposed provisions would have required manufacturing mostly product in the tunnel kiln that contains a mass fraction of organic HAP in the resins, binders, and additives that is less than the average organic HAP mass fraction of these constituents for the year (on a 12-month rolling basis), and manufacture of the product with an organic HAP mass fraction greater than the average for the year would be limited to only five kiln cars during such maintenance periods.

The commenter explained that tunnel kilns comprise a preheating zone, firing zone, and cooling zone in sequence with kiln cars passing through the system containing pressed/formed refractory. Each kiln is designed to hold a set number of kiln cars in the preheating zone position and a separate set number of kiln cars in the firing zone position. The type and amount of resins,

binders, and additives in the kiln are dictated by each product type's formulation. During drying in the tunnel kilns, organic HAP in resins, binders, and additives is volatilized and either destroyed in the tunnel kiln or exhausted to a THC control device for destruction.

The commenter noted that according to the memorandum *Technology Review for the Refractory Products Manufacturing NESHAP*, available in the docket for this action (Docket Item No. EPA-HQ-OAR-2020-0148-0008), these proposed provisions are based on the facility's specific internal operation procedures for the regenerative thermal oxidizer (RTO) unit that state that tunnel kiln batches exceeding 90 binder counts can only be pushed in a train of "five cars or less." The commenter asserted that the EPA has catered the five-kiln car provision too specifically to the facility's one tunnel kiln due to extremely limited data, as the facility is the only U.S. nonclay refractory producer using organic binder and a THC control device. The commenter further stated that these procedures only address one of the two continuous kilns at the facility. The commenter also stated that since kiln cars can hold a variety of refractory products of varying dimensions and formulation, the mass of organic HAP emissions from the resins, binders, and additives from car to car is variable. The commenter noted that a new nonclay refractory tunnel kiln could potentially be constructed with larger kiln cars, such that each kiln car could be designed to hold a greater mass of nonclay refractory and emit much more organic HAP while still satisfying the proposed provisions during periods of control device maintenance.

The commenter suggested that instead the proposed requirements that apply during THC control device bypass for continuous kilns should be amended to reflect a more universal operating parameter limit (OPL). The OPL is established during performance testing in accordance with 40 CFR 63.9800 and Table 4 to subpart SSSSS. Each continuous unit is

required to establish a 3-hour block operating limit for maximum allowable organic HAP processing rate, which is calculated as the average organic HAP processing rate from performance testing plus 10 percent in accordance with 40 CFR 63.9798(c) and EPA guidance. The commenter suggested that the organic HAP processing rate during THC control device bypass be limited to the average organic HAP processing rate from the most recent performance test demonstration, as determined on an hourly basis (*i.e.*, 1-hour block average). The commenter also provided suggested revisions to the regulatory language to implement this suggestion.

*Response:* The EPA proposed an improved work practice standard to further minimize emissions during periods of scheduled maintenance and bypass of the thermal oxidizer as a result of the CAA section 112(d)(6) technology review process. In addition to the current work practice to minimize emissions during these periods, we proposed other measures based on the best practices of one facility. These included: 1) limiting the applicability to THC control devices; 2) an annual limit on the number of hours for bypass of the control device; 3) the requirement to process product containing lower percentages of organic HAP content in the resins, binders and additives (less than the average organic HAP mass fraction); 4) an allowance for the processing of five kiln cars per year with greater than average organic HAP mass fraction; and 5) reporting of the mass of organic HAP emissions for bypass periods in the semi-annual compliance report.

As a result of the comments regarding these proposed measures, we learned we did not have full knowledge of the details of the facility's internal operating procedures during scheduled maintenance and bypass of the thermal oxidizer. As the commenter clarified, tunnel kiln batches exceeding 90 binder counts (a measure of the volume of binder) can only be pushed in a train of "five cars or less" during these periods. The commenter also clarified this procedure applies to only one of the two continuous tunnel kilns. We agree with the commenter that using

the “kiln car” limitation is an imprecise way of limiting organic HAP emissions due to the potential variation in kiln car size. However, the EPA found the facility’s suggestion to set an operating limit during bypass periods equal to the “average organic HAP processing rate from the most recent performance test, as determined on an hourly basis (1-hour block average)” and rule language edits to be inconsistent with other rule requirements. Specifically, because performance tests are required to be conducted while the source is operating at the maximum organic HAP processing rate as defined in §63.9824, we found this suggestion to be inconsistent with the rule requirement to minimize emissions during control device bypass and maintenance required by §63.9792(e)(2).

We are therefore finalizing revisions to the proposed revised work practice standard that reflect additional improvements as a result of these comments and follow-up discussions with the facility to clarify their best practices. Specifically, we are revising the proposed work practice to limit the organic HAP processing rate rather than the organic HAP content during control device bypass and maintenance as proposed. The proposed rule language that required the facility to minimize HAP emissions during the period when the kiln is operating and the control device is out of service by “scheduling of the manufacture of product for which the mass fraction of organic HAP in the resins, binders, and additives is at the lower end of the range produced (*i.e.*, below the typical average mass fraction of organic HAP in the resins, binders, and additives)” is revised to “maintaining the organic HAP processing rate (lb/hr) below the average organic HAP processing rate based on actual production on a 6-month rolling basis (not to include periods of kiln shut down) or below the organic HAP processing rate (lb/hr) that coincides with the lowest hour of the most recent 3-hour performance test, whichever is lower.” We are then requiring sources to demonstrate compliance with the requirement to minimize emissions by maintaining

the organic HAP processing rate (lb/hr) during control device maintenance and bypass below lower of the two organic HAP processing rates described above. We are also revising the proposed reporting requirements to reflect these changes. In addition, we are removing the allowance for the processing of five kiln cars per year with greater than average organic HAP mass fraction from the work practice. Changing the work practice requirement from the mass fraction of organic HAP in the product to the HAP processing rate while also removing the reference to kiln cars provides a clearer and more consistent metric for demonstrating that HAP emissions have been minimized and provides the facility with options for minimizing emissions during the period when the kiln is operating and the control device is out of service (*e.g.*, loading kiln cars with products with lower HAP contents, reducing the number of kiln cars pushed through the kiln per hour).

In summary, the finalized work practice standard for periods of control device maintenance and bypass includes: 1) the proposed limit of the applicability to THC control devices; 2) the proposed annual limit on the number of hours for bypass of the control device; 3) the revised requirement to maintain the organic HAP processing rate below the average organic HAP processing rate, determined as the lower of either a) the average organic HAP processing rate (lb/hr) based on actual production on a 6-month rolling basis, not to include periods of kiln shut down) or b) the organic HAP processing rate determined during the lowest hour of the most recent performance test; and 4) semiannual compliance reporting of the following information: the average organic HAP processing rate based on actual production on a 6-month rolling basis (not to include periods of kiln shut down) or the lowest hour from the most recent performance test (whichever is lower), the actual organic HAP processing rate, the amount of product produced and the mass of organic HAP in the product produced, the estimated THC emissions,

the number of hours the control device was bypassed during the compliance period (as proposed), and the cumulative number of hours the control device was bypassed over the last 12-month period (as proposed). The final improvement of the work practice standard as a result of the CAA section 112(d)(6) technology review process does not include the proposed allowance for processing of five kiln cars per year with greater than average organic HAP mass fraction during control device maintenance and bypass.

Meeting minutes from the discussion with the facility and follow-up emails are included in the rulemaking docket (Docket ID No. EPA-HQ-OAR-2020-0148).

*Comment:* One commenter noted that the EPA proposed to limit the number of hours during which a continuous kiln is operating and the THC control device is bypassed for maintenance to 750 hours per year on a 12-month rolling basis. The commenter noted that the EPA identified this provision as an improvement to the current standard since there is no limit on the total amount of time the provision may be used other than the requirement for the owner or operator to minimize the amount of time for each bypass.

The commenter also noted that per proposed requirements in 40 CFR 63.9792(e) and 63.9812(g), kiln operation during bypass of the THC control device requires advanced approval from the Administrator (86 FR 3079, 3099, January 14, 2021). The commenter noted that the EPA also proposed that affected sources must document the planned maintenance procedures in the OM&M plan, and the proposed requirement in 40 CFR 63.9814(c)(7) would require reporting in the semi-annual compliance report for these periods, including a statement of whether or not the control device maintenance was included in the approved request to bypass the control device while scheduled maintenance is performed. The EPA has proposed to allow 181 days for compliance with the proposed revisions, noting that this time would be used to

update the OM&M plans and seek approval from the Administrator before taking the control device on the affected kiln out of service for scheduled maintenance.

The commenter stated that the proposed requirement for Administrator approval is based on its current state-issued title V permit. The commenter noted that the state has delegated authority and is the “Administrator” in regard to implementing and enforcing the NESHAP requirements at 40 CFR part 63. The commenter clarified that the current title V permit requires advance notification via e-mail to the state air quality inspector and to the Regional Air Quality staff that the RTO will be out of service for scheduled maintenance, but the permit does not include approval requirements. In addition, the commenter stated that the EPA did not differentiate between THC control device planned and unplanned maintenance and did not specify the scope of maintenance (*e.g.*, washdowns, bakeouts, media placement) to be documented in the OM&M plan. Because the proposed provisions require approval from the Administrator in advance, the commenter noted that it appears kiln operation during unplanned maintenance events is not addressed.

The commenter requested that the EPA amend 40 CFR 63.9792(e), 63.9812(g), 63.9814(c)(7), Table 3, and Table 9 to specify that kiln operation during periods of control device maintenance requires “Administrator notification” and not “Administrator approval.” The commenter suggested that the notification could include a telephone call or e-mail to the Administrator within 24 hours of a bypass event. The commenter asserted that this provision would allow for unplanned/emergency maintenance, which is common for continuous process units, particularly where facilities operate 24 hours a day, 365 days a year. Additionally, requiring notification rather than approval for each bypass allows facilities to avoid complete shutdown of a process unit if the Administrator cannot be reached for approval (*e.g.*, control

device requires unplanned maintenance at 3 AM on Saturday and Administrator cannot be reached until 9 AM Monday). The commenter noted that the EPA's proposed recordkeeping and reporting requirements related to the 750-hour (12-month rolling basis) limit on use of the bypass provisions would still adequately qualify these bypasses with Administrator notification versus approval. The commenter also asserted that requiring notification instead of approval does not restore "malfunction" provisions, as the term is defined under 40 CFR 63.2, as the bypass period is limited to 750 hours per year (12-month rolling basis). Also, per *U.S. Sugar Corp. v. EPA*, 830 F.3d 579, 606-610 (2016), the Administrator may determine whether the facility took good faith efforts to minimize resulting emissions including preventative and corrective actions and whether excess emissions were caused by poor maintenance or careless operation.

*Response:* The EPA disagrees with the commenter's characterization of the proposed requirements in 40 CFR 63.9792(e) and 63.9812(g), regarding kiln operation during bypass of the THC control device and advanced approval from the Administrator (86 FR 3099, January 14, 2021). The EPA agrees these citations pertain to kiln operation during bypass of the THC control device and advanced approval from the Administrator, but these provisions are original rule requirements that were not proposed to be amended. The original general requirements for complying with subpart SSSSS are contained in 40 CFR 63.9792, and 40 CFR 63.9792(e) specifically permits the continued operation of a continuous kiln during bypass and scheduled maintenance of the control device for that kiln, provided the owner or operator meets the requirements of the work practice standard and requests and receives approval by the Administrator per 40 CFR 63.9792(e)(1), which requires a separate request each time the owner or operator plans to bypass the control device for scheduled maintenance. Similarly, the original requirements for notifications for subpart SSSSS are contained in 40 CFR 63.9812, and 40 CFR



63.9812(g) specifically states that owner and operators must request approval from the Administrator before bypassing the control device, as specified in 40 CFR 63.9792(e), and that a separate request must be submitted for approval each time.

We also disagree with the statement that the EPA proposed a new requirement that affected sources must document the planned maintenance procedures in the OM&M plan, as this requirement was also required in the original rule at 40 CFR 63.9794(a)(6). The provisions in 40 CFR 63.9794(a)(6) pertain to any maintenance that requires use of the bypass provisions. The provision includes “procedures for the proper operation and routine and long-term maintenance of each process unit and [air pollution control device],” which encompasses the more specific types of maintenance described by the commenter (*e.g.*, washdowns, bakeouts, media placement). Further, subpart SSSSS does not include the terms “planned maintenance” or “unplanned maintenance,” nor does it define “scheduled maintenance.” However, as noted earlier in this response, a request for Administrator approval must be submitted each time the owner or operator plans to bypass the control device for “scheduled maintenance,” and per Table 2 to subpart SSSSS, the owner or operator must receive approval from the Administrator before taking the control device on the affected kiln out of service for scheduled maintenance.

After review of the commenter’s request, we are not amending the requirements to request Administrator approval, and we also disagree with the comment that there is a need to differentiate between THC control device “planned and unplanned maintenance” within subpart SSSSS. The EPA did not propose to amend the requirement to request Administrator approval each time an owner or operator plans to bypass the control device, and we conclude that allowing notification rather than approval would not be an improvement to the standard. In particular, if owners and operators were allowed to comply with the work practice standard during periods of

maintenance that are only “scheduled” a few hours in advance of the control device bypass, those owners and operators would likely find it very challenging to comply with all the specific requirements that must be met during bypass to demonstrate compliance with the requirement in 40 CFR 63.9792(e)(2) to minimize HAP emissions during the bypass. Therefore, the work practice standard we are finalizing for periods of control device bypass and scheduled maintenance applies to all THC control device bypasses for scheduled maintenance for which the owner or operator receives approval from the Administrator. Most of the maintenance activities described by the commenter are likely to be considered “scheduled maintenance” for which the owner or operator will be able to request advanced approval from the Administrator before the control device is bypassed. These maintenance activities are the activities that should be documented in the OM&M plan. Bypass of the control device without Administrator approval would be considered a deviation from the standard.

Finally, the EPA agrees with the commenter that the state has delegated authority and is the “Administrator” with regard to implementing and enforcing the 40 CFR subpart SSSSS requirements. However, the state does not have the authority to set standards less stringent than those promulgated by the Administrator in accordance with CAA section 112(l). Therefore, in order for the current title V permit to satisfy the 40 CFR 63.9792(e) and 63.9812(g) requirements, it must require advance approval by the Administrator and not the less stringent notification requirements.

*Comment:* One commenter stated that the EPA must remove the alternative fuel allowance provision. The commenter noted that the existing standards contain a provision allowing for “the use of alternative fuels” (such as fuel oil, propane, and pulverized coal) during certain circumstances as an exception to the work practice standard that requires use of natural

gas as the core emission control requirement. The commenter noted that the EPA has recognized this provision allows for an exception from the standards in “situations analogous to malfunctions” and explained in 2003 that its justification for this provision was similar to the SSM exemption. At the time, the EPA stated that, “Just as an exceedance of emission limits during a malfunction is not considered a violation, as indicated in 40 CFR 63.6(f)(1) and (h)(1), we believe that using other fuels during periods when natural gas is unavailable should also not be considered a violation of the work practice standard for clay and chromium refractory products kilns” (68 FR 18740, April 16, 2003).

The commenter stated that to the extent that the EPA retains this work practice standard as the sole or an additional control, it must remove the illegal alternative fuel allowance provision. The commenter further stated that including this provision means that the emission standard (*i.e.*, the fuel requirement) is not “continuous” and does not apply at all times, which is a violation of CAA sections 302(k) and 112. The commenter asserted that the EPA should recognize this allowance is as unlawful as the SSM exemption that it has recognized the need to remove (*Sierra Club*, 551 F.3d at 1022), and therefore the EPA should remove this specific malfunction exemption as well. Failing to do so would violate CAA section 112(d)(6), by refusing to make a “necessary” revision to assure compliance with the CAA, and it would be arbitrary because it would leave in place a harmful exemption that allows the release of more pollution than CAA section 112 allows, based on the illegal justification of a “malfunction.” In this instance, the commenter noted, such a “malfunction” may simply be an increase in natural gas prices, making this allowance particularly arbitrary because it conflicts with the CAA’s public health objective and the floor requirement to assure emission standards based on the “achieved” emission reductions, without consideration of cost.

*Response:* The EPA agrees with the commenter that the existing standards require the use of natural gas or equivalent fuel. It also allows “the use of alternative fuels” during “periods of natural gas curtailment or supply interruption” as defined in 40 CFR 63.9824. Propane is considered to be a fuel that is equivalent to natural gas, not an alternative fuel, as stated by the commenter.

The current rule requirements related to alternative fuel usage state that procedures for alternative fuel usage must be included in the OM&M plan per 40 CFR 63.9794 (a)(10)(i), require notification of alternative fuel usage within 48 hours of the declaration of a period of natural gas curtailment or supply interruption per 40 CFR 63.9812(f), and reporting of termination of alternative fuel usage within 10 working days per 40 CFR 63.9814. The “period of natural gas curtailment or supply interruption” is defined in 40 CFR 63.9824 as “the period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.”

The alternative fuel allowance was added to the rule as a result of comments from the industry on the 2002 proposed rule, in which the EPA proposed the use of natural gas or other such clean fuel to prohibit the use of coal, fuel oil, waste oil, or equivalent fuels and the resulting emissions of HF, HCl or HAP metals from existing clay refractories (67 FR 42122, June 20, 2002). The EPA provided the justification for the allowance referenced by the commenter in the memo titled *Summary of Public Comments and Responses on the Proposed NESHAP for Refractory Products Manufacturing* (Docket ID OAR-2002-0088, Item No. V-C-01, page 12). Industry stakeholders opposed the 2002 proposed work practice that required use of natural gas, stating that many kilns were designed to use fuels other than natural gas and the need to use these

alternative fuels arises during natural gas shortages or price increases. They also stated that during natural gas shortages, residential users receive priority over industrial users of natural gas and that prohibiting the use of alternative fuels could adversely impact the viability of some refractory operations. After considering those comments, the EPA finalized the alternative fuel allowance (73 FR 18736, April 16, 2003). The EPA did not consider a price increase to be a justification for alternative fuel use at that time and omitted that reason from the natural gas curtailment definition. Contrary to the commenter's argument, this definition expressly states that an increase in natural gas prices does not constitute a period of natural gas curtailment or supply interruption, so the commenter's claim that such a "malfunction" may simply be an increase in natural gas prices is not valid.

We acknowledge much has changed since the original NESHAP was promulgated in 2003. For this final action, the facilities in the source category confirmed they use natural gas and propane during normal operations in accordance with the NESHAP and state requirements. In the event of a natural gas curtailment or supply interruption, they indicated they would not switch to another fuel due to the fuel-specific burner technology in use. They stated they would either continue to use equivalent fuel (propane backup) or shut down and retool their process units to use equivalent fuel (propane) or an alternative fuel (fuel oil) since they have no back-up supply of propane and it would likely also be curtailed due to demand. The EPA document titled *AP-42, Section 1.5 Liquefied Petroleum Gas Combustion, updated July 2008*, further supports that response, explaining that burner design technology is specific to fuel type and that retooling may even be required when changing the fuel type from natural gas to propane. Retooling may include replacement of fuel injector tips and/or vaporizers to provide burners with the proper fuel to air ratio. In addition, as noted previously in this preamble, there are no facilities currently

subject to subpart SSSSS that manufacture chromium refractory products. Based on the changes in in kiln and burner design technologies since 2003, and on the determination that propane backup is available (or if retooling is required, retooling can be done for propane instead of other alternative fuels) for all existing sources subject to this standard and can be part of the design of new sources, we are removing the alternative fuel usage allowance. As a result, the use of alternative fuels will not be permitted and will be a deviation from the work practice standard, which will apply during normal operation as well as during periods of natural gas curtailment/supply interruption. The removal of the natural gas alternative fuel allowance and the requirement to use natural gas or equivalent fuels reflects a development in our understanding of refractory kiln fuel combustion technology since promulgation of the original standard.

4. What is the rationale for our final approach for the technology review?

For the reasons explained in the preamble to the proposed rule (86 FR 3095, January 14, 2021), we proposed amendments to improve the work practice standard that applies when a continuous kiln THC control device is bypassed for maintenance to reflect technical developments in pollution control practices since the promulgation of the original standard. We evaluated all of the comments received on these improvements and the EPA's proposed amendments, and for the reasons explained in the comment responses in section IV.B.3 of this preamble, we are finalizing amendments to the proposed work practice standard to further improve the work practices based on the best practices of one affected source in the source category. We are also finalizing amendments to the existing work practice standard that permits the use of alternative fuels when natural gas or equivalent fuel is not available, after review of the fuel combustion technology used by sources in the source category in response to public comments. Further explanation is included in the comment responses in section IV.B.3 of this

preamble. The removal of the natural gas alternative fuel allowance and the requirement to use natural gas or equivalent fuels reflects a development in our understanding of refractory kiln fuel combustion technology since promulgation of the original standard.

*C. CAA Sections 112(d)(2) and (3) Amendments for the Refractory Products Manufacturing Source Category*

1. What amendments did we propose pursuant to 112(d)(2) and (3) for the Refractory Products Manufacturing source category?

In the January 14, 2021 action, we proposed amendments to the Refractory Products Manufacturing NESHAP to address previously unregulated HAP for affected sources in the clay and nonclay refractory subcategories pursuant to 112(d)(2) and (3).

*a. Clay Refractory Sources*

For new and existing clay refractory kilns, we proposed MACT floor limits for Hg and for PM (as a surrogate for non-Hg metal HAP), in addition to the current NESHAP requirements for clay refractory sources, based on emissions test data for existing clay refractory kilns. The emissions test data for existing clay kilns reviewed for this action confirmed trace (but measurable) amounts of non-Hg metal HAP and Hg emissions. As a result, we proposed MACT floor limits of 3.1 lb/hr for PM and 6.1 micrograms per dry standard cubic meter ( $\mu\text{g}/\text{dscm}$ ), corrected to 18 percent oxygen, for Hg for each new kiln used to produce clay refractory products. We proposed MACT floor limits of 9.5 lb/hr for PM and 18  $\mu\text{g}/\text{dscm}$ , corrected to 18 percent oxygen, for Hg for each existing kiln used to produce clay refractory products. Similar to other source categories, we proposed a limit for PM (as a surrogate for non-Hg metal HAP) because the metal HAP are contained in the PM and the control techniques that would be used to control PM will equally control non-Hg metal HAP. To demonstrate compliance with the

emission limits, we proposed initial and repeat 5-year performance testing for the regulated pollutants, continuous parameter monitoring, and daily visible emissions (VE) checks. Owners and operators whose clay refractory products kilns are equipped with a fabric filter to reduce PM (as a surrogate for non-Hg metal HAP) have the option of demonstrating compliance using a bag leak detection (BLD) system instead of daily VE checks.

We also evaluated the beyond-the-floor option of requiring all existing sources to meet the proposed new source MACT standards for Hg and PM (as a surrogate for total non-Hg metal HAP). We concluded that the costs of the necessary controls were not reasonable relative to the level of emission reduction achieved for either the Hg or PM beyond-the-floor options. In addition, these controls would create additional solid waste, as there would be a need to dispose of the collected metal-contaminated dust. Therefore, we did not propose beyond-the-floor limits for Hg or PM. A brief discussion regarding the derivation of the Hg and PM limits and the beyond-the-floor option was included in the preamble to the proposed rule (86 FR 3095, January 14, 2021), and a detailed discussion is included in the technical memorandum titled *Development of Proposed Standards and Impacts for the Refractory Products Manufacturing NESHAP*, located in the docket for this action (Docket Item No. EPA-HQ-OAR-2020-0148-0014).

#### *b. Nonclay Refractory Sources*

For new and existing curing ovens, shape dryers, and kilns that are used to process refractory products that use organic HAP (*i.e.*, nonclay refractory sources), we proposed a work practice standard to use natural gas as fuel to limit metal HAP emissions (except during periods of natural gas curtailment or supply interruption) as provided in CAA section 112(h) in lieu of a numerical emissions standard, in addition to the current NESHAP THC limits for new and existing nonclay refractory sources. These sources currently employ the use of thermal oxidizers,



regenerative thermal oxidizers and catalytic oxidizers to meet the THC limit, however, the NESHAP did not require sources to use natural gas as fuel for sources in this subcategory because the metal HAP emissions were determined to be below measurable quantities due to the use of purified nonclay raw materials. Available HAP data for these sources in the 2017 National Emission Inventory (NEI) were found to be outdated and not reflective of current operating conditions. The 2017 NEI included measurable PM emissions for these existing nonclay refractory sources, and the PM would be expected to have trace amounts of metal HAP; however, we have no emission stack test data to indicate measurable emissions of metal HAP for these existing nonclay refractory sources.<sup>2</sup> Therefore, as discussed in the preamble to the proposed rule (86 FR 3095, January 14, 2021), we proposed a work practice standard to use natural gas as fuel for new and existing nonclay refractory sources to limit metal HAP emissions in lieu of a numerical emissions standard in accordance with CAA section 112(h).

2. How did the 112(d)(2) and (3) amendments change for the Refractory Products Manufacturing source category?

We are making one change to the proposed CAA section 112(d)(2) and (3) amendments. For each new kiln used to produce clay refractory products, we are finalizing the proposed MACT floor limits of 3.1 lb/hr for PM (as a surrogate for metal HAP) and 6.1 µg/dscm, corrected to 18 percent oxygen, for Hg. For each existing kiln used to produce clay refractory products, we are finalizing the proposed MACT floor limits of 9.5 lb/hr for PM (as a surrogate for metal HAP) and 18 µg/dscm, corrected to 18 percent oxygen, for Hg. We are also finalizing

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<sup>2</sup> Thus, while we believe that there are metal HAP emissions, the lack of data showing measurable emissions leads the EPA to conclude that the application of measurement methodology to this class of sources is not practicable due to technological and economic limitations. *See* CAA 112(h)(2)(B).

the proposed requirements for initial and repeat 5-year performance testing, continuous parameter monitoring, daily VE checks, and the option of demonstrating compliance using a BLD system instead of daily VE checks for clay refractory products kilns equipped with a fabric filter to reduce PM (as a surrogate for metal HAP). For each new and existing affected source used to produce nonclay refractory products, we are finalizing the work practice standard to use natural gas as fuel to limit metal HAP emissions as provided in CAA section 112(h) in lieu of a numerical emissions standard generally as proposed. However, based on the review of combustion technologies prompted by public comments on the existing work practice standard to use natural gas as fuel (see section IV.B.3 of this preamble), the finalized work practice for new and existing sources used to produce nonclay refractory products requires the use natural gas or an equivalent fuel at all times, without an exception during periods when natural gas is not available.

3. What key comments did we receive on the 112(d)(2) and (3) amendments and what are our responses?

We received one general comment supporting the proposed CAA section 112(d)(2) and (3) amendments for refractory products manufacturing. The comment letter also included recommendations for more stringent standards under CAA section 112(d)(2) and (3) for this source category.

*Comment:* One commenter supported the EPA's proposed decision to set numeric emission standards for Hg and for PM as a surrogate for non-Hg metal HAP for existing clay refractory sources. The commenter noted that setting limits for all unregulated sources of HAP emissions in this category is required by CAA section 112(d)(6) (see *LEAN v. EPA*, 955 F.3d 1088). However, the commenter asserted that the proposed limits are not strong enough to satisfy

the CAA section 112(d)(2)-(3) requirements and that the standards must reflect the maximum achievable degree of emission limitation. First, the commenter stated that the limits were set using insufficient data and that it is not clear why the EPA did not use its authority under CAA section 114 to collect additional emission data. Second, the commenter stated that the “upper prediction limit” (UPL) methodology of setting standards is not consistent with the statutory requirement of the floor as the “average emission limitation” achieved by the best-performing sources, which violates CAA section 112(d)(3) and is arbitrary. Therefore, the commenter stated, the proposed standards do not come close to the “maximum achievable” degree of emission reduction.

*Response:* As courts have regularly upheld, the EPA has wide latitude in determining the extent of data gathering necessary to solve a problem and courts generally defer to the Agency’s decision to proceed on the basis of imperfect scientific information, rather than to “invest the resources to conduct the perfect study.” *Sierra Club v. EPA*, 167 F. 3d 658, 662 (DC Cir. 1999)) (“If EPA were required to gather exhaustive data about a problem for which gathering such data is not yet feasible, the agency would be unable to act even if such inaction had potentially significant consequences...[A]n agency must make a judgment in the face of a known risk of unknown degree.” *Mexichem Specialty Resins, Inc.*, 787 F.3d. 561 (D.C. Cir. 2015)).

Contrary to the commenter’s assertion, the EPA had sufficient data available from the two clay refractory products kilns at Whitacre-Greer to calculate MACT floors, so additional data collection was not necessary. In the case of PM, multiple sets of emissions test data were available for each of the two kilns, allowing for a data set for each kiln that was robust enough that the EPA did not need to evaluate the uncertainty associated with a limited dataset for either kiln. Further, as noted in the memorandum *Emissions Data Used to Develop the Refractory*

*Products Manufacturing Risk and Technology Review (RTR) Risk Modeling Input Files* (Docket Item No. EPA-HQ-OAR-2020-0148-0006), St. Gobain has three batch tunnel kilns and two continuous tunnel kilns capable of producing both clay and nonclay refractories, so they would be subject to the proposed standards for PM and Hg when producing clay refractories. However, 40 CFR 63.9824 defines a clay refractory product as “a refractory product that contains at least 10 percent uncalcined clay by weight prior to firing in a kiln” and includes six classifications of clay (ball clay, bentonite, common clay and shale, fire clay, fuller's earth, and kaolin). Based on the 2017 raw material information provided by St. Gobain when the EPA was developing the inputs file for the risk modeling, the quantities of clay fired do not meet the 10 percent threshold for the manufacture of clay refractories and are more consistent with the use of clay as a binder, so these kilns are expected to be subject to the clay refractory kiln standards infrequently. Therefore, it is not clear that using the authority under CAA section 114 for these kilns would have yielded any additional PM or Hg data for clay refractory kilns. In other words, if the EPA had requested emissions testing under CAA section 114 for these five kilns when they manufacture clay refractories, the EPA would have had to wait for the facility to change their product on each kiln, which may not have been feasible.

Regarding the UPL approach, in August 2013, the D.C. Circuit issued its decision in *National Association. of Clean Water Agencies (NACWA) v. EPA*, which addressed challenges to the EPA's 2011 Sewage Sludge Incinerator (SSI) rule, issued under section 129 of the CAA. In *NACWA v. EPA*, the court remanded the EPA's use of the UPL methodology to the Agency for further explanation of how the methodology reflected the average emissions limitation achieved by the best-performing 12 percent of sources (for existing sources) and the average emissions limitation achieved by the best-performing similar source (for new sources). *NACWA v. EPA*,

734 F.3d 1115, 1151. Because the UPL methodology used in the SSI rule was the same as that used in the major source Boiler MACT (40 CFR part 63, subpart DDDDD), the EPA requested a remand of the record in *U.S. Sugar v. EPA* in order to address the court's decision in *NACWA v. EPA*. The EPA prepared a memorandum explaining the methodology for the UPL. This memorandum, the EPA's *Response to Remand of the Record for Major Source Boilers*, provides a detailed rationale to use the UPL as the basis of setting a MACT floor for new and existing sources, and the methodology and the explanation in the memorandum were upheld by the D.C. Circuit in *U.S. Sugar v. EPA*, 830 F.3d at 639. Following the UPL memorandum, the EPA issued a subsequent memorandum specifically addressing the application of the UPL methodology when setting MACT emission limits with limited datasets, *Approach for Applying the Upper Prediction Limit to Limited Datasets*. In that memorandum, the EPA concluded that there are additional considerations when setting MACT floors for limited datasets. The D.C. Circuit agreed that the EPA sufficiently explained the general application of the UPL approach to small datasets in *Sierra Club v. EPA*, 895 F.3d 1, 14 (D.C. Cir. 2018). The MACT floors were set consistent with EPA guidance and with previous court decisions.

4. What is the rationale for our final approach for the 112(d)(2) and (3) amendments?

For the reasons explained in the preamble to the proposed rule (86 FR 3095, January 14, 2021), and in the comment responses in sections IV.B.3 and IV.C.3 of this preamble and the comment summary and response document (available in the docket for this rulemaking), we are finalizing a work practice requirement to use natural gas at all times for new and existing clay refractory product sources, and we are making no changes and are finalizing the proposed 112(d)(2) and (3) amendments for clay refractory kilns in the Refractory Products Manufacturing source category.

*D. SSM Amendments for the Refractory Products Manufacturing Source Category*

1. What SSM amendments did we propose for the Refractory Products Manufacturing source category?

We proposed amendments to the Refractory Products Manufacturing NESHAP to remove and revise provisions related to SSM that are not consistent with the 2008 court decision that the standards apply at all times. More information concerning the elimination of SSM provisions is provided in the preamble to the proposed rule (86 FR 3095, January 14, 2021).

2. How did the SSM amendments change for the Refractory Products Manufacturing source category?

We are finalizing the SSM provisions as proposed with no changes (86 FR 3095, January 14, 2021).

3. What key comments did we receive on the SSM amendments and what are our responses?

We received one general comment supporting the proposed amendments to the SSM provisions for refractory products manufacturing and three comments requesting that the rule requirements for this source category apply at all times, not just during periods of SSM.

4. What is the rationale for our final approach for the SSM provisions?

For the reasons explained in the proposed rule and after evaluation of the comments on the proposed amendments to the SSM provisions for the Refractory Products Manufacturing NESHAP, we are finalizing the proposed amendments related to SSM that are not consistent with the requirement that the standards apply at all times. More information concerning the proposed amendments to the SSM provisions is in the preamble to the proposed rule (86 FR 3095, January 14, 2021).

*E. Electronic Reporting Amendments for the Refractory Products Manufacturing Source Category*

1. What electronic reporting amendments did we propose for the Refractory Products Manufacturing source category?

In the January 14, 2021, notice we proposed amendments to subpart SSSSS to require owners and operators of refractory product manufacturing facilities to submit electronic copies of NOCS reports, performance test results, and performance evaluation results through the EPA's CDX using CEDRI.

The proposed amendments apply to the NOCS required by 40 CFR 63.7(b) and (c), 40 CFR 63.8(f)(4), 40 CFR 63.9(b) through (e) and (h) and 40 CFR 63.9812, and performance test results and performance evaluation results required by 40 CFR 63.9(h), 40 CFR 63.9800, and 40 CFR 63.9814. The proposal would require that all NOCS be submitted as portable document format (PDF) files and uploaded to CEDRI. For performance test and performance evaluation results, the proposal would require test results that use test methods supported by the EPA's ERT listed on the ERT website<sup>1</sup> at the time of the test be submitted in the format generated through the use of the ERT or an electronic file consistent with the extensible markup language (XML) schema on the ERT website. Performance test results using test methods that are not supported by the ERT at the time of the test would be required to be submitted as a PDF file using the attachment module of the ERT. In addition, the proposal included two broad circumstances for electronic reporting extensions. A description of the electronic data submission process is provided in the memorandum *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for NESHAP Rules*, available in the docket for this action (Docket Item No. EPA-HQ-OAR-2020-0148-0003). The proposed rule

requirements would replace the current rule requirements to submit the NOCS reports, performance test results, and performance evaluation results to the Administrator at the appropriate address listed in 40 CFR 63.13. The proposed rule requirement would not affect submittals required by state air agencies. The proposed compliance date for existing affected sources to comply with the electronic reporting requirements for NOCS reports, performance test results, and performance evaluation results is 181 days after the final rule is published to begin electronic reporting. New affected sources are required to comply with the electronic reporting requirements for NOCS reports, performance test results, and performance evaluation results on the effective date of the standard or upon startup, whichever is later.

2. How did the electronic reporting provisions change for the Refractory Products Manufacturing source category?

No changes were made to the proposed electronic reporting provisions.

3. What key comments did we receive on the electronic reporting provisions and what are our responses?

We received one comment letter that addressed the proposed electronic reporting provisions for refractory products manufacturing. The commenter generally supported the proposed amendments except for the proposed provisions of 40 CFR 63.9814(k) and (l) that would provide instructions for affected sources unable to submit an electronic report either due to a force majeure event or an outage of CEDRI.

4. What is the rationale for our final approach for the electronic reporting requirements?

For the reasons explained in the preamble to the proposed rule (86 FR 3095, January 14, 2021) and the comment summary and response document (available in the docket for this



rulemaking), we are making no changes and are finalizing the electronic reporting provisions as proposed.

*F. Technical Amendments for the Refractory Products Manufacturing Source Category*

In the final rule, we are amending 40 CFR 63.9824 and Table 4 to subpart SSSSS of part 63, as proposed, to clarify the location in 40 CFR part 60 of applicable EPA test methods. We are also amending 40 CFR 63.9814 and 63.9816 to include the requirements to record and report information on failures to meet the applicable standard.

In the final rule, as proposed, we are adding and updating test methods that are incorporated by reference. In accordance with requirements of 1 CFR part 51.5, the EPA is incorporating by reference the following voluntary consensus standards (VCS) described in the amendments to 40 CFR 63.14:

- ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], issued August 31, 1981, proposed to be IBR approved for Table 4 to subpart SSSSS. This document specifies methods, apparatus and calculations which are used to determine quantitatively, the gaseous constituents of the exhausts including oxygen and carbon dioxide resulting from station combustions sources.
- ASTM D6348-12e1, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, Approved February 1, 2012, proposed to be IBR approved for Table 4 to subpart SSSSS.
- ASTM D6784-16, “Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method),” (Approved March 1, 2016), proposed to be IBR approved for Table 4 to subpart SSSSS.

- EPA-454/R-98-015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997, proposed to be IBR approved for 40 CFR 63.9804(f). This document provides guidance on the use of triboelectric monitors as fabric filter bag leak detectors. The document includes fabric filter and monitoring system descriptions; guidance on monitor selection, installation, setup, adjustment, and operation; and quality assurance procedures.

## **V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted**

### *A. What are the affected facilities?*

Currently, three major sources subject to the Refractory Products Manufacturing NESHAP are operating in the United States. The NESHAP applies to each new, reconstructed, and existing affected source located at a refractory products manufacturing facility that is a major source of HAP emissions, is located at a major source of HAP emissions, or is part of a major source of HAP emissions. A refractory products manufacturing facility is a plant site that manufactures refractory products, such as refractory bricks, refractory shapes, monolithics, kiln furniture, crucibles, and other materials used for lining furnaces and other high temperature process units. Refractory products manufacturing facilities typically process raw material by crushing, grinding, and screening; mixing the processed raw materials with binders and other additives; forming the refractory mix into shapes; and drying and firing the shapes. The NESHAP lists the affected sources for four subcategories across the industry as the shape dryers, curing ovens, and kilns that are used to manufacture refractory products that use organic HAP; shape preheaters, pitch working tanks, defumers, and coking ovens that are used to produce pitch-impregnated refractory products; kilns that are used to manufacture chromium refractory

products; and kilns that are used to manufacture clay refractory products. The three major sources currently operating in the U.S. can be grouped into two of the subcategories and use curing ovens and kilns that are used to manufacture nonclay refractory products that use organic HAP and kilns that are used to manufacture clay refractory products.

*B. What are the air quality impacts?*

At the current level of control, the estimated emissions of HAP from the Refractory Products Manufacturing source category are approximately 40 tpy. The final amendments require that all three major sources in the Refractory Products Manufacturing source category comply with the relevant emission standards at all times, including periods of SSM. The final amendments also limit the number of hours a continuous kiln THC control device can be bypassed during scheduled maintenance and require minimizing emissions of THC during bypass periods. We were unable to quantify the emissions that occur during periods of SSM or the specific emissions reductions that would occur as a result of this action. However, eliminating the SSM exemption has the potential to reduce emissions by requiring facilities to meet the applicable standard during SSM periods. Requiring the use of natural gas as kiln fuel at all times also ensures that PM (as a surrogate for non-Hg metal HAP) and Hg will not be emitted from combustion of coal, fuel oil, or waste-derived fuels.

Indirect or secondary air emissions impacts are impacts that would result from the increased electricity usage associated with the operation of control devices (*e.g.*, increased secondary emissions of criteria pollutants from power plants). Energy impacts consist of the electricity and steam needed to operate control devices and other equipment. The final amendments would have no effect on the energy needs of the affected facilities in this source category and would, therefore, have no indirect or secondary air emissions impacts.

*C. What are the cost impacts?*

We estimate that each facility in this source category will experience costs as a result of these final amendments. Estimates for reporting and recordkeeping costs for each facility are associated with the electronic reporting requirements, elimination of the SSM exemption, and revision of the requirements that apply during times of scheduled maintenance of continuous kiln control devices. The costs associated with the electronic reporting requirements are attributed to submittal of NOCS reports, performance test results, and performance evaluation results using CEDRI and include time for becoming familiar with CEDRI. The costs associated with the revised SSM requirements were estimated for re-evaluating previously developed SSM record systems. The costs associated with recordkeeping to document the frequency and duration of scheduled maintenance of control devices for continuous kilns were also estimated. The recordkeeping and reporting costs are presented in section VI.C of this preamble.

We estimate the costs associated with this action are primarily due to the new compliance testing requirements for the clay refractory kilns in this action. Two of the major source refractory manufacturing facilities manufacture clay refractory and are required to conduct periodic compliance testing for PM as a surrogate for non-Hg metal HAP and Hg once every 5 years. One clay refractory manufacturing facility has two continuous kilns and the other has two continuous kilns and three batch kilns. The costs associated with conducting the combined PM and Hg test for each continuous kiln stack are estimated to be about \$23,600. The costs associated with conducting the combined PM and Hg test for each batch kiln stack are estimated to be about \$31,800. We also assumed that tests for additional stacks at the same facility would be conducted in the same trip, so the additional cost is less due to reduced travel costs. The total costs for the two facilities to test the seven kilns in a single year would be \$115,300. In addition

to the testing costs, each facility performing the testing will have an additional \$6,900 in reporting costs per facility in the year in which the test occurs.

For kilns that meet the limits without any controls, owners or operators are required to conduct VE monitoring to demonstrate compliance. One of the continuous kilns is controlled with a wet scrubber, but the other six kilns are expected to need to conduct VE monitoring. We estimate that the monitoring will cost \$3,740 per year per stack, for a total of \$22,400 per year.

For further information on the potential testing and monitoring costs, see the memorandum titled *Development of Proposed Standards and Impacts for the Refractory Products Manufacturing NESHAP*, located in the docket for this action (Docket Item No. EPA-HQ-OAR-2020-0148-0014).

*D. What are the economic impacts?*

The economic impact analysis is designed to inform decision makers about the potential economic consequences of the compliance costs outlined in section V.C of this preamble. To assess the maximum potential impact, the largest cost expected to be experienced in any one year is compared to the total sales for the ultimate owner of the affected facilities to estimate the total burden for each owner. For these final amendments, the total cost of testing, monitoring, and recordkeeping and reporting is estimated to be \$158,140. The total annual costs associated with the requirements range from 0.00008 to 0.18 percent of annual sales revenue per ultimate owner. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to customers or absorbed by the firms.

The EPA also prepared a small business screening assessment to determine whether any of the identified affected facilities are small entities, as defined by the U.S. Small Business Administration. One of the facilities affected by these amendments is a small entity. However,

the annual cost associated with the requirements is 0.18 percent of annual sales revenue for the owner of that facility. Therefore, there are no significant economic impacts on a substantial number of small entities from these amendments.

*E. What are the benefits?*

As stated above in section V.B. of this preamble, we were unable to quantify the specific emissions reductions associated with eliminating the SSM exemption, although this change has the potential to reduce emissions of volatile organic HAP.

Because these final amendments are not considered economically significant, as defined by Executive Order 12866, we did not monetize the benefits of reducing these emissions. This does not mean that there are no benefits associated with the potential reduction in volatile organic HAP from this rule.

*F. What analysis of environmental justice did we conduct?*

Executive Order 12898 directs the EPA to identify the populations of concern who are most likely to experience unequal burdens from environmental harms; specifically, minority populations, low-income populations, and indigenous peoples (59 FR 7629, February 16, 1994). Additionally, Executive Order 13985 was signed to advance racial equity and support underserved communities through Federal government actions (86 FR 7009, January 20, 2021). The EPA defines environmental justice (EJ) as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The EPA further defines the term fair treatment to mean that “no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or

programs and policies” ([ HYPERLINK "<https://www.epa.gov/environmentaljustice>" ]). In recognizing that minority and low-income populations often bear an unequal burden of environmental harms and risks, the EPA continues to consider ways of protecting them from adverse public health and environmental effects of air pollution.

Based on an analysis of exposed populations, the EPA determined that the Refractory Products Manufacturing source category does not pose a disproportionately high adverse health impact on minority populations and/or low-income populations, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994) and referenced in Executive Order 13985 (86 FR 7009, January 20, 2021). The EPA remains committed to engaging with communities and stakeholders throughout the development of air pollution regulations.

To examine the potential for any environmental justice issues that might be associated with this source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we also evaluated the distribution of HAP-related cancer and noncancer risks from the Refractory Products Manufacturing source category across different demographic groups within the populations living near facilities.<sup>3</sup>

The results of the demographic analysis for the Refractory Products Manufacturing source category indicates that no one is exposed to a cancer risk at or above 1-in-1 million or to a chronic noncancer TOSHI greater than 1. In addition, no percentages of the populations exposed to emissions from the source category are higher than their respective nationwide average

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<sup>3</sup> Demographic groups included in the analysis are: White, African American, Native American, other races and multiracial, Hispanic or Latino, children 17 years of age and under, adults 18 to 64 years of age, adults 65 years of age and over, adults without a high school diploma, people living below the poverty level, people living two times the poverty level, and linguistically isolated people.

percentages. Thus, the populations living near refractory products manufacturing facilities are similar to the national average in demographic characteristics, and we do not see a disproportionately high exposure to the population groups indicated in the Executive Orders. The methodology and the results of the demographic analysis are presented in more detail in the technical report titled *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Refractory Products Manufacturing Source Category Operations*, September 2020, available in the docket for this action (Docket Item No. EPA-HQ-OAR-2020-0148-0007).

*G. What analysis of children’s environmental health did we conduct?*

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action’s health and risk assessments are contained in section IV.A of this preamble and are further documented in the *Residual Risk Assessment for the Refractory Products Manufacturing Source Category in Support of the 2020 Risk and Technology Review Proposed Rule*, available in the Refractory Products Manufacturing docket (Docket Item No. EPA-HQ-OAR-2020-0148-0013).

**VI. Statutory and Executive Order Reviews**

Additional information about these statutes and Executive Orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.



*A. Executive Orders 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review*

This action is not a significant regulatory action and was, therefore, not submitted to OMB for review.

*B. Paperwork Reduction Act (PRA)*

The information collection activities in this action have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 2040.08. You can find a copy of the ICR in the Refractory Products Manufacturing Docket (Docket ID No. EPA-HQ-OAR-2020-0148), and it is briefly summarized here.

As part of the RTR for the Refractory Products Manufacturing NESHAP, the EPA is not revising the existing emission limit requirements but is adding new emission limit requirements for existing clay refractory sources and is adding new work practices for existing nonclay refractory sources. The EPA is also revising the SSM provisions of the rule and is adding the use of electronic data reporting for future performance test result and performance evaluation result submittals, and NOCS reports. This information is being collected to assure compliance with 40 CFR part 63, subpart SSSSS.

*Respondents/affected entities:* Facilities manufacturing refractory products.

*Respondent's obligation to respond:* Mandatory (40 CFR part 63, subpart SSSSS).

*Estimated number of respondents:* In the 3 years after the amendments are final, approximately three respondents per year will be subject to the NESHAP and no additional respondents are expected to become subject to the NESHAP during that period.

Frequency of response: The total number of responses is 15 per year.

*Total estimated burden:* The average annual burden to the three refractory products manufacturing facilities over the 3 years after the amendments are final is estimated to be 230 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 202 hours (per year). Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* The average annual cost to the refractory products manufacturing facilities is \$27,100 in labor costs in the first 3 years after the amendments are final. The average annual capital and operation and maintenance (O&M) cost is \$69,900. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be \$9,990.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

*C. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The annualized costs associated with the requirements in this action for the affected small entities is described in section V.C. above.

*D. Unfunded Mandates Reform Act (UMRA)*

This action does not contain an unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. While this action creates an enforceable duty on the private sector, the cost does not exceed \$100 million or more.

*E. Executive Order 13132: Federalism*

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

*F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have tribal implications as specified in Executive Order 13175. No tribal facilities are known to be engaged in any of the industries that would be affected by this action. In addition, the EPA conducted a proximity analysis for this source category and found that no refractory products manufacturing facilities are located within 50 miles of tribal lands. Thus, Executive Order 13175 does not apply to this action.

*G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks*

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in section IV.A of this preamble and are further documented in the Refractory Products Manufacturing Docket.

*H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

*I. National Technology Transfer and Advancement Act and 1 CFR part 51*

This action involves technical standards. The EPA amended the Refractory Products Manufacturing NESHAP in this action with two methods that can be used as alternatives to the EPA methods in the current NESHAP: ANSI/ASME PTC 19.10–1981, “Flue and Exhaust Gas Analyses” and ASTM D6348-12e1, “Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform (FTIR) Spectroscopy”. The EPA also amended the Refractory Products Manufacturing NESHAP in this action with two new methods: EPA Method 29 (portion for Hg only) and alternative method ASTM D6784-16, “Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)”. The EPA also added new guidance to the NESHAP: EPA-454/R-98-015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997. The methods and guidance will be incorporated by reference as described below.

The EPA is incorporating by reference the VCS ANSI/ASME PTC 19.10–1981, “Flue and Exhaust Gas Analyses.” This method determines quantitatively the gaseous constituents of exhausts resulting from stationary combustion sources. The manual procedures (but not instrumental procedures) of VCS ANSI/ASME PTC 19.10-1981—Part 10 may be used as an alternative to EPA Method 3B for measuring the oxygen or carbon dioxide content of the exhaust gas. The gases covered in ANSI/ASME PTC 19.10–1981 are oxygen, carbon dioxide, carbon monoxide, nitrogen, sulfur dioxide, sulfur trioxide, nitric oxide, nitrogen dioxide, hydrogen sulfide, and hydrocarbons, however the use in this rule is only applicable to oxygen and carbon dioxide and is an acceptable alternative to the manual portion only and not the instrumental portion.

The EPA is incorporating by reference the VCS ASTM D6348-12e1, “Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform (FTIR) Spectroscopy” as an acceptable alternative to EPA Method 320. ASTM D6348-03(2010) was determined to be equivalent to EPA Method 320 with caveats. ASTM D6348-12e1 is a revised version of ASTM D6348-03(2010) and includes a new section on accepting the results from the direct measurement of a certified spike gas cylinder, but lacks the caveats placed on the D6348-03(2010) version. The VCS ASTM D6348-12e1 “Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform (FTIR) Spectroscopy” is an extractive FTIR field test method used to quantify gas phase concentrations of multiple analytes from stationary source effluent and is an acceptable alternative to EPA Method 320 at this time with caveats requiring inclusion of selected annexes to the standard as mandatory. When using ASTM D6348-12e1, the following conditions must be met:

(1) The test plan preparation and implementation in the Annexes to ASTM D6348-03, sections A1 through A8 are mandatory; and

(2) In ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent (%) R must be determined for each target analyte (Equation A5.5).

In order for the test data to be acceptable for a compound,  $\%R$  must be  $70\% \leq R \leq 130\%$ . If the  $\%R$  value does not meet this criterion for a target compound, the test data is not acceptable for that compound and the test must be repeated for that analyte (*i.e.*, the sampling and/or analytical procedure should be adjusted before a retest). The  $\%R$  value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated  $\%R$  value for that compound by using the following equation: Reported Results = ((Measured Concentration in Stack))/( $\%R$ ) x 100.

The EPA is also incorporating by reference the VCS ASTM D6784-16, “Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)” as an acceptable alternative to EPA Method 29 (portion for Hg only) as a method for measuring elemental, oxidized, particle-bound, and total Hg concentrations ranging from approximately 0.5 – 100 micrograms per normal cubic meter ( $\mu\text{g}/\text{Nm}^3$ ). This test method describes equipment and procedures for obtaining samples from effluent ducts and stacks, equipment and procedures for laboratory analysis, and procedures for calculating results. VCS ASTM D6784-16 allows for additional flexibility in the sampling and analytical procedures for the earlier version of the same standard VCS ASTM D6784-02 (Reapproved 2008).

The EPA is also incorporating by reference EPA-454/R-98-015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997, IBR for 40 CFR 63.9804(f). This document provides guidance on the use of triboelectric monitors as fabric filter bag leak detectors and includes fabric filter and monitoring system descriptions; guidance on monitor selection, installation, setup, adjustment, and operation; and quality assurance procedures.

Guidance document EPA-454/R-98-015 and ASTM D6784-16 are available electronically through <https://www.regulations.gov/> and/or in hard copy at the appropriate EPA office (see the **ADDRESSES** section of this preamble for more information). The ANSI/ASME document (ANSI/ASME PTC 19.10–1981) is available from the American Society of Mechanical Engineers (ASME) at <http://www.asme.org>; by mail at Three Park Avenue, New York, NY 10016-5990; or by telephone at (800) 843-2763. The ASTM methods are available

from ASTM International at <https://www.astm.org>; by mail at 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; or by telephone at (610) 832-9585.

*J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in the technical report titled *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Refractory Products Manufacturing Source Category Operations*, September 2020, available in the Refractory Products Manufacturing Docket for this action (Docket Item No. EPA-HQ-OAR-2020-0148-0007).

The EPA provided opportunities to engage with the EPA on this action. The Agency offered a public hearing and reached out to communities in other ways, including meetings to exchange information with stakeholders about this action. We did not receive a request for a public hearing, and we did not receive feedback regarding EJ during the meetings.

*K. Congressional Review Act (CRA)*

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

**List of Subjects in 40 CFR part 63**

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

\_\_\_\_\_  
Dated:

\_\_\_\_\_  
**Michael S. Regan,**

*Administrator.*



For the reasons set out in the preamble, 40 CFR part 63 is amended as follows:

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR  
POLLUTANTS FOR SOURCE CATEGORIES**

1. The authority citation for part 63 continues to read as follows:

**Authority:** 42 U.S.C. 7401 *et seq.*

**Subpart A—General Provisions**

2. Section 63.14 is amended by:

- a. Revising paragraphs (e)(1) and (h)(86);
- b. Redesignating paragraphs (h)(104) through (118) as paragraphs (h)(105) through (119);
- c. Adding new paragraph (h)(104); and
- d. Revising paragraph (n)(4).

The revisions and additions read as follows:

**§63.14 Incorporations by reference.**

\* \* \* \* \*

(e) \* \* \*

(1) ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], issued August 31, 1981, IBR approved for §§63.309(k), 63.457(k), 63.772(e) and (h), 63.865(b), 63.997(e), 63.1282(d) and (g), and 63.1625(b), table 5 to subpart EEEE, §§63.3166(a), 63.3360(e), 63.3545(a), 63.3555(a), 63.4166(a), 63.4362(a), 63.4766(a), 63.4965(a), and 63.5160(d), table 4 to subpart UUUU, table 3 to subpart YYYY, §§63.7822(b), 63.7824(e), 63.7825(b), 63.8000(d), 63.9307(c), 63.9323(a), 63.9621(b) and (c), 63.11148(e), 63.11155(e), 63.11162(f), 63.11163(g), 63.11410(j), 63.11551(a), 63.11646(a), and 63.11945, and table 4 to subpart AAAAA, table 5 to subpart DDDDD, table 4 to subpart JJJJJ, table 4 to

subpart KKKKK, table 4 to subpart SSSSS, tables 4 and 5 of subpart UUUUU, table 1 to subpart ZZZZZ, and table 4 to subpart JJJJJ.

\* \* \* \* \*

(h) \* \* \*

(86) ASTM D6348-12e1, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, Approved February 1, 2012, IBR approved for §§63.997(e), 63.1571(a), and 63.2354(b), table 5 to subpart EEEE, table 4 to subpart UUUU, §§63.7142(a) and (b) and 63.8000(d), and table 4 to subpart SSSSS.

\* \* \* \* \*

(104) ASTM D6784-16, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), Approved March 1, 2016, IBR approved for table 4 to subpart SSSSS.

\* \* \* \* \*

(n) \* \* \*

(4) EPA-454/R-98-015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997, <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=2000D5T6.PDF>, IBR approved for §§63.548(e), 63.864(e), 63.7525(j), 63.8450(e), 63.8600(e), 63.9632(a), 63.9804(f), and 63.11224(f).

\* \* \* \* \*

**Subpart SSSSS—National Emission Standards for Hazardous Air Pollutants for  
Refractory Products Manufacturing**

3. Section 63.9786 is amended by revising paragraphs (a), (b), and (d)(2) to read as follows:

**§63.9786 When do I have to comply with this subpart?**

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section.

(1) If the initial startup of your affected source is before April 16, 2003, then you must comply with the emission limitations for new and reconstructed sources in this subpart no later than April 16, 2003, except as otherwise specified in §§63.9792, 63.9812(c) and (e), and 63.9814(b)(6) and Tables 1 through 11 to this subpart.

(2) If the initial startup of your affected source is after April 16, 2003, then you must comply with the emission limitations for new and reconstructed sources in this subpart upon initial startup of your affected source, except as otherwise specified in §§63.9792, 63.9812(c) and (e), and 63.9814(b)(6) and Tables 1 through 11 to this subpart.

(b) If you have an existing affected source, you must comply with the emission limitations for existing sources no later than April 17, 2006, except as otherwise specified in §§63.9792, 63.9812(c) and (e), and 63.9814(b)(6) and Tables 1 through 11 to this subpart.

\* \* \* \* \*

(d) \* \* \*

(2) All other parts of the existing facility must be in compliance with this subpart by 3 years after the date the area source becomes a major source, except as otherwise specified in §§63.9792, 63.9812(c) and (e), and 63.9814(b)(6) and Tables 1 through 11 to this subpart.

\* \* \* \* \*

4. Section 63.9792 is amended by revising paragraph (a) introductory text, paragraphs (b) and (c), paragraph (e) introductory text, and paragraphs (e)(2) and (3) to read as follows:

**§63.9792 What are my general requirements for complying with this subpart?**

(a) You must be in compliance with the emission limitations (including operating limits and work practice standards) in this subpart at all times, except during periods specified in paragraphs (a)(1) and (2) of this section before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. You must be in compliance with the emission limitations (including operating limits and work practice standards) in this subpart at all times, on or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

\* \* \* \* \*

(b) Except as specified in paragraph (e) of this section, before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i). During the period between the compliance date specified for your affected source in §63.9786 and the date upon which continuous monitoring systems have been installed and validated and any applicable operating limits have been established, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment. On and after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, at all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control

practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.

(c) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3). On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you are not required to develop a written SSMP according to the provisions in §63.6(e)(3).

\* \* \* \* \*

(e) If you own or operate an affected continuous kiln used to manufacture refractory products that use organic HAP and you must perform scheduled maintenance on the THC control device for that kiln, you may bypass the kiln THC control device and continue operating the kiln subject to the alternative standard established in this paragraph upon approval by the Administrator, provided you satisfy the conditions listed in paragraphs (e)(1) through (3) of this section.

\* \* \* \* \*

(2) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must minimize HAP emissions during the period when the kiln is operating, and the control device is out of service. On and after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must minimize

HAP emissions during the period when the kiln is operating and the control device is out of service by complying with the applicable standard in Table 3 to this subpart.

(3) You must minimize the time period during which the kiln is operating and the control device is out of service. On and after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the total time during which the kiln is operating and the control device is out of service for each year on a 12-month rolling basis must not exceed 750 hours.

\* \* \* \* \*

5. Section 63.9794 is amended by revising paragraphs (a)(7), (8), (12), and (13) and paragraph (b)(2) to read as follows:

**§63.9794 What do I need to know about operation, maintenance, and monitoring plans?**

(a) \* \* \*

(7) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in §§63.8(c)(1), (3), (4)(ii), (7), and (8), and 63.9804. On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in §§63.8(c)(3), (4)(ii), (7), and (8), and 63.9804.

(8) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d). On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, ongoing data quality assurance

procedures consistent with the requirements in §63.8(d)(1) and (2). You must keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan in §63.8(d)(2) is revised, you must keep previous (*i.e.*, superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under §63.8(d)(2).

\* \* \* \* \*

(12) Before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, if you operate a kiln that is subject to the limits on the type of fuel used, as specified in items 3 and 4 of Table 3 to subpart SSSSS, procedures for using alternative fuels. On and after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you may not use a fuel other than natural gas or equivalent to fire the affected kiln.

(13) If you operate an affected continuous kiln used to manufacture refractory products that use organic HAP and you plan to take the kiln THC control device out of service for scheduled maintenance, as specified in §63.9792(e), the procedures specified in paragraphs (a)(13)(i) and (ii) of this section.

(i) Procedures for minimizing HAP emissions from the kiln during periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service. On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, document the average organic HAP processing rate for that kiln (*i.e.*, the average organic HAP processing rate based on (a) the actual production on a 6-month

rolling basis (not to include periods of kiln shut down) or (b) the HAP processing rate (lb/hr) that coincides with the lowest hour of the most recent 3-hour performance test, whichever is lower), the mass fraction of organic HAP in the resins, binders, and additives for each product manufactured in the kiln and procedures for ensuring that the actual organic HAP processing rate on an hourly basis does not exceed the average organic HAP processing rate.

(ii) Procedures for minimizing any period of scheduled maintenance on the kiln control device when the kiln is operating and the control device is out of service. On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, procedures for ensuring that the total time during which the kiln is operating and the control device is out of service does not exceed 750 hours for each year on a 12-month rolling basis.

(b) \* \* \*

(2) After completing the performance tests to demonstrate that compliance with the emission limits can be achieved at the revised operating limit parameter value, you must submit the summary of the performance test results and the revised operating limits as part of the Notification of Compliance Status required under §63.9(h) and the complete test report according to §63.9814(h).

\* \* \* \* \*

6. Section 63.9800 is amended by revising paragraphs (c) and (d) and paragraph (g) introductory text and adding paragraph (g)(4) to read as follows:

**§63.9800 How do I conduct performance tests and establish operating limits?**

\* \* \* \* \*

(c) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, each performance test must be conducted according to the



requirements in §63.7 and under the specific conditions in Table 4 to this subpart. On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, each performance test must be conducted under the specific conditions in Table 4 to this subpart.

(d) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1). On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you may not conduct performance tests during periods of malfunction. You also may not conduct performance tests during periods of startup or shutdown. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. You must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

\* \* \* \* \*

(g) You must use the data gathered during the performance test and the equations in paragraphs (g)(1) through (4) of this section to determine compliance with the emission limitations.

\* \* \* \* \*

(4) To determine compliance with the Hg emission concentration limit listed in Table 1 to this subpart, you must calculate your emission concentration corrected to 18 percent oxygen for each test run using Equation 4 of this section:

$$C_{\text{Hg-C}} = \frac{2.9 \times C_{\text{Hg}}}{(20.9 - C_{\text{O}_2})} \quad (\text{Eq. 4})$$

Where:

$C_{Hg-C}$  = Hg concentration, corrected to 18 percent oxygen, micrograms per dry standard cubic meters ( $\mu\text{g/dscm}$ )

$C_{Hg}$  = Hg concentration (uncorrected),  $\mu\text{g/dscm}$

$C_{O_2}$  = oxygen concentration, percent.

\* \* \* \* \*

7. Section 63.9804 is amended by revising paragraphs (a)(13), (e)(1), and (f)(1) to read as follows:

**§63.9804 What are my monitoring system installation, operation, and maintenance requirements?**

(a) \* \* \*

(13) At all times, you must maintain your CPMS in accordance with §63.9792(b), including, but not limited to, keeping the necessary parts readily available for routine repairs of the CPMS.

\* \* \* \* \*

(e) \* \* \*

(1) Use a pH CPMS with a minimum accuracy of  $\pm 0.2$  pH units.

\* \* \* \* \*

(f) \* \* \*

(1) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the “Fabric Filter Bag Leak Detection Guidance” (EPA-454/R-98-015, September 1997) (incorporated by reference, see §63.14). Other types of bag leak detection

systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

\* \* \* \* \*

8. Section 63.9806 is amended by revising paragraph (d) to read as follows:

**§63.9806 How do I demonstrate initial compliance with the emission limits, operating limits, and work practice standards?**

\* \* \* \* \*

(d) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.9812(e). After **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for affected sources that commence construction or reconstruction after **January 14, 2021**, and on and after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for all other affected sources, you must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.9812(e) and 63.9814(j).

9. Section 63.9808 is amended by revising paragraph (b) to read as follows:

**§63.9808 How do I monitor and collect data to demonstrate continuous compliance?**

\* \* \* \* \*

(b) At all times, you must maintain your monitoring systems in accordance with §63.9792(b), including, but not limited to, keeping the necessary parts readily available for routine repairs of the monitoring equipment.

\* \* \* \* \*

10. Section 63.9810 is amended by revising paragraph (e) and adding paragraph (f) to read as follows:

**§63.9810 How do I demonstrate continuous compliance with the emission limits, operating limits, and work practice standards?**

\* \* \* \* \*

(e) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must report each instance in which you did not meet each emission limit and each operating limit in this subpart that applies to you. This includes periods of SSM. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in §63.9814. On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must report each instance in which you did not meet each emission limit and each operating limit in this subpart that applies to you. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in §63.9814.

(1) [Reserved]

(2) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1) and your OM&M plan. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e). On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL**

**REGISTER]**, consistent with §§63.9792(b) and 63.9800(d), deviations are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.9792(b) and your OM&M plan. The Administrator will determine whether deviations are violations, according to the provisions in §63.9792(b).

(f) You must demonstrate continuous compliance with the operating limits in Table 2 to this subpart for visible emissions (VE) from clay refractory products kilns that are uncontrolled or equipped with DLA, dry lime injection fabric filter (DIFF), dry lime scrubber/fabric filter (DLS/FF) or other dry control device as described in paragraph (f)(1) or (2) of this section.

(1) *VE testing.* Monitoring VE at each kiln stack according to the requirements in paragraphs (f)(1)(i) through (v) of this section.

(i) Perform daily VE observations of each kiln stack according to the procedures of EPA Method 22 of 40 CFR part 60, appendix A-7. You must conduct the EPA Method 22 test while the affected source is operating under normal conditions. The duration of each EPA Method 22 test must be at least 15 minutes.

(ii) If VE are observed during any daily test conducted using EPA Method 22 of 40 CFR part 60, appendix A-7, you must promptly conduct an opacity test, according to the procedures of EPA Method 9 of 40 CFR part 60, appendix A-4. If opacity greater than 10 percent is observed, you must initiate and complete corrective actions according to your OM&M plan.

(iii) You may decrease the frequency of EPA Method 22 testing from daily to weekly for a kiln stack if one of the conditions in paragraph (f)(1)(iii)(A) or (B) of this section is met.

(A) No VE are observed in 30 consecutive daily EPA Method 22 tests for any kiln stack;

or

(B) No opacity greater than 10 percent is observed during any of the EPA Method 9 tests for any kiln stack.

(iv) If VE are observed during any weekly test and opacity greater than 10 percent is observed in the subsequent EPA Method 9 test, you must promptly initiate and complete corrective actions according to your OM&M plan, resume testing of that kiln stack following EPA Method 22 of 40 CFR part 60, appendix A-7, on a daily basis, as described in paragraph (f)(1)(i) of this section, and maintain that schedule until one of the conditions in paragraph (f)(1)(iii)(A) or (B) of this section is met, at which time you may again decrease the frequency of EPA Method 22 testing to a weekly basis.

(v) If greater than 10 percent opacity is observed during any test conducted using EPA Method 9 of 40 CFR part 60, appendix A-4, you must report these deviations by following the requirements in §63.9814.

(2) *Alternative to VE testing.* In lieu of meeting the requirements under paragraph (f)(1) of this section, you may conduct a PM test at least once every year following the initial performance test, according to the procedures of EPA Method 5 of 40 CFR part 60, appendix A-3, and the provisions of §63.9800(e) and (f).

11. Section 63.9812 is amended by revising paragraphs (b) and (c), paragraph (e) introductory text, paragraph (e)(1), paragraph (f) introductory text, and paragraph (g) to read as follows:

**§63.9812 What notifications must I submit and when?**

\* \* \* \* \*

(b) As specified in §63.9(b)(2) and (3), if you start up your affected source before April 16, 2003, you must submit an Initial Notification not later than 120 calendar days after April 16,

2003, or no later than 120 days after the source becomes subject to this subpart, whichever is later.

(c) As specified in §63.9(b)(3), if you start up your new or reconstructed affected source on or after April 16, 2003, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart. Initial Notifications required to be submitted after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for affected sources that commence construction or reconstruction after **January 14, 2021**, and on and after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for all other affected sources submitting initial notifications required in §63.9(b) must be submitted following the procedure specified in §63.9814(h) through (l).

\* \* \* \* \*

(e) If you are required to conduct a performance test, you must submit a Notification of Compliance Status as specified in §63.9(h) and paragraphs (e)(1) and (2) of this section. After **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for affected sources that commence construction or reconstruction after **January 14, 2021**, and on and after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** for all other affected sources, submit all subsequent Notifications of Compliance Status following the procedure specified in §63.9814(h) through (l).

(1) For each compliance demonstration that includes a performance test conducted according to the requirements in Table 4 to this subpart, you must submit the Notification of Compliance Status, including the summary of the performance test results, before the close of business on the 60th calendar day following the completion of the performance test.

\* \* \* \* \*

(f) Before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, if you operate a clay refractory products kiln or a chromium refractory products kiln that is subject to the work practice standard specified in item 3 or 4 of Table 3 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected kiln, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.9824. The notification must include the information specified in paragraphs (f)(1) through (5) of this section. On and after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you may not use a fuel other than natural gas or equivalent to fire the affected kiln.

\* \* \* \* \*

(g) If you own or operate an affected continuous kiln used to manufacture refractory products that use organic HAP and must perform scheduled maintenance on the THC control device for that kiln, you must request approval from the Administrator before bypassing the control device, as specified in §63.9792(e). You must submit a separate request for approval each time you plan to bypass the kiln control device.

12. Section 63.9814 is amended by:

- a. Revising paragraph (c) introductory text and paragraph (c)(4);
- b. Adding paragraph (c)(7);
- c. Revising paragraphs (d) and (e) and paragraph (g) introductory text; and
- d. Adding paragraphs (h) through (l).

The revisions and additions read as follows:

**§63.9814 What reports must I submit and when?**

\* \* \* \* \*



(c) The compliance report must contain the information in paragraphs (c)(1) through (7) of this section.

\* \* \* \* \*

(4) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, if you had a startup, shutdown, or malfunction during the reporting period, and you took actions consistent with your SSMP and OM&M plan, the compliance report must include the information specified in §63.10(d)(5)(i). On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, if you had a deviation from any emission limitations (emission limit, operating limit, or work practice standard) during the reporting period that apply to you, and you took actions consistent with your OM&M plan, the compliance report must include the information specified in (d) and (e) of this section.

\* \* \* \* \*

(7) For each period when an affected continuous kiln used to manufacture refractory products that use organic HAP was operating while the THC control device was out of service, the compliance report must include a description of the control device maintenance performed, including the information specified in paragraphs (c)(7)(i) through (vi) of this section.

(i) The date and time when the control device was shut down and restarted.

(ii) Identification of the kiln that was operating and the number of hours that the kiln operated while the control device was out of service.

(iii) A statement of whether or not the control device maintenance was included in your approved request to bypass the control device while scheduled maintenance is performed, developed as specified in §63.9792(e).

(iv) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a statement of whether emissions were minimized while the control device was out of service in accordance with your OM&M plan. After **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a statement of whether emissions were minimized while the control device was out of service in accordance with your OM&M plan and the information specified in paragraphs (c)(7)(iv)(A) through (C) of this section.

(A) The average organic HAP processing rate based on actual production on a 6-month rolling basis (not to include periods of kiln shut down) or the lowest hourly organic HAP processing rate from the most recent performance test on that kiln, whichever is lower.

(B) The actual hourly organic HAP processing rate for the kiln while the control device was out of service.

(C) The amount of product manufactured and the mass of organic HAP in the product manufactured in the kiln while the control device was out of service.

(v) After **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, an estimate of the THC emissions from the continuous kiln stack while the control device was out of service.

(vi) After **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the total number of hours that the kiln has operated while the control device was out of service during the last year on a 12-month rolling basis.

(d) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for each deviation from an emission limitation (emission limit, operating limit, or work practice standard) that occurs at an affected source where you are not

using a CPMS to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (4) and (d)(1) and (2) of this section. This includes periods of SSM. On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for each deviation from an emission limitation (emission limit, operating limit, or work practice standard) that occurs at an affected source where you are not using a CPMS to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (4) and (d)(1) through (3) of this section.

(1) The compliance report must include the total operating time of each affected source during the reporting period.

(2) The compliance report must include information on the number, duration in hours, and cause of deviations (including unknown cause, if applicable) and the corrective action taken.

(3) The compliance report must include the date and time of each deviation, a list of the affected sources or equipment, and an estimate of each regulated pollutant emitted over the emission limit and a description of the method used to estimate the emissions.

(e) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for each deviation from an emission limitation (emission limit, operating limit, or work practice standard) occurring at an affected source where you are using a CPMS to comply with the emission limitation in this subpart, the compliance report must include the information in paragraphs (c)(1) through (4) and (e)(1) through (13) of this section. This includes periods of SSM. On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for each deviation from an emission limitation (emission limit, operating limit, or work practice standard) occurring at an affected

source where you are using a CPMS to comply with the emission limitation in this subpart, the compliance report must include the information in paragraphs (c)(1) through (4) and (e)(1) through (13) of this section.

(1) The total operating time of each affected source during the reporting period.

(2) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the date and time that each startup, shutdown, or malfunction started and stopped. On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the date and time that each startup, shutdown, or malfunction started and stopped is not required.

(3) The date, time, and duration in hours that each CPMS was inoperative.

(4) The date, time and duration in hours that each CPMS was out of control, including the information in §63.8(c)(8), as required by your OM&M plan.

(5) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the date and time that each deviation from an emission limitation (emission limit, operating limit, or work practice standard) started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction. On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for each deviation from an emission limitation (emission limit, operating limit, or work practice standard), the date and time that each deviation started and stopped, the duration in hours, a list of the affected sources or equipment, an estimate of each regulated pollutant emitted over the emission limit, and a description of the method used to estimate the emissions.

(6) A description of corrective action taken in response to a deviation.

(7) The total number of deviations during the reporting period, a summary of the total duration in hours of the deviations during the reporting period, and the total duration as a percentage of the total source operating time during that reporting period.

(8) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(9) A summary of the total duration in hours of CPMS downtime during the reporting period and the total duration of CPMS downtime as a percentage of the total source operating time during that reporting period.

(10) A brief description of the process units.

(11) A brief description of the CPMS.

(12) The date of the latest CPMS initial validation or accuracy audit.

(13) A description of any changes in CPMS, processes, or controls since the last reporting period.

\* \* \* \* \*

(g) Before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, if you operate a clay refractory products kiln or a chromium refractory products kiln that is subject to the work practice standard specified in item 3 or 4 of Table 3 to this subpart, and you

use a fuel other than natural gas or equivalent to fire the affected kiln, you must submit a report of alternative fuel use within 10 working days after terminating the use of the alternative fuel.

The report must include the information in paragraphs (g)(1) through (6) of this section. On and after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you may not use a fuel other than natural gas or equivalent to fire the affected kiln.

\* \* \* \* \*

(h) Beginning on **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedures specified in paragraphs (h)(1) through (3) of this section.

*(1) Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test.* Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

*(2) Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.* The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) *Confidential business information (CBI)*. Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information submitted under paragraph (h)(1) or (2) of this section, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated using the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraphs (h)(1) and (2) of this section. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(i) Beginning on **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, within 60 days after the date of completing each continuous emissions monitoring system (CEMS) performance evaluation (as defined in §63.2), you must submit the results of the performance evaluation following the procedures specified in paragraphs (i)(1) through (3) of this section.

(1) *Performance evaluations of CEMS measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation*. Submit the results of the performance evaluation to the EPA via CEDRI, which

can be accessed through the EPA's CDX. The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on the EPA's ERT website.

*(2) Performance evaluations of CEMS measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation.* The results of the performance evaluation must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

*(3) CBI.* Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information submitted under paragraph (i)(1) or (2) of this section, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated using the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraphs (h)(1) and (2) of this section. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.



(j) Beginning **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must submit all subsequent Notification of Compliance Status reports in PDF format to the EPA via CEDRI, which can be accessed through EPA's CDX (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim, submit a complete report, including information claimed to be CBI, to the EPA. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Refractory Lead MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (j). All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(k) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (k)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) A description of measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(l) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of *force majeure* for failure to timely comply with that reporting requirement. To assert a claim of *force majeure*, you must meet the requirements outlined in paragraphs (l)(1) through (5) of this section.

(1) You may submit a claim if a *force majeure* event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a *force majeure* event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the *force majeure* event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the *force majeure* event;

(iii) A description of measures taken or to be taken to minimize the delay in reporting;

and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of *force majeure* and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the *force majeure* event occurs.

13. Section 63.9816 is amended by revising paragraph (a)(2) and paragraphs (c)(5), (8), and (10) to read as follows:

**§63.9816 What records must I keep?**

(a) \* \* \*

(2) Before **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the records in §63.6(e)(3)(iii) through (v) related SSM.

\* \* \* \* \*

(c) \* \* \*

(5) For each deviation of an operating limit parameter value, record the information in paragraphs (c)(5)(i) through (iv) of this section.

(i) The date, time, and duration in hours of the deviation.

(ii) On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, a list of the affected sources or equipment.

(iii) On or after **[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, an estimate of the quantity in pounds of each regulated pollutant over any emission limit and a description of the method used to estimate emissions.

(iv) Actions taken to minimize emissions in accordance with §63.9792(b), a brief explanation of the cause of the deviation, and the corrective action taken to return the affected unit to its normal or usual manner of operation.

\* \* \* \* \*

(8) Records of maintenance activities and inspections performed on control devices, including all records associated with the scheduled maintenance of the THC control devices on continuous kilns used to manufacture refractory products that use organic HAP, as specified in §63.9792(e).

\* \* \* \* \*

(10) Current copies of the OM&M plan, including any revisions and records documenting conformance with those revisions.

14. Section 63.9820 is revised to read as follows:

**§63.9820 What parts of the General Provisions apply to me?**

Table 11 to this subpart shows which parts of the General Provisions specified in §§63.1 through 63.16 apply to you.

15. Section 63.9822 is amended by revising paragraph (c) introductory text and adding paragraph (c)(5) to read as follows:

**§63.9822 Who implements and enforces this subpart?**

\* \* \* \* \*

(c) The authorities that cannot be delegated to state, local, or tribal agencies are as specified in paragraphs (c)(1) through (5) of this section.

\* \* \* \* \*

(5) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

16. Section 63.9824 is amended by revising the definition of “Particulate matter (PM)” to read as follows:

**§63.9824 What definitions apply to this subpart?**

\* \* \* \* \*

*Particulate matter (PM)* means, for the purposes of this subpart, emissions of particulate matter that serve as a measure of total particulate emissions as measured by EPA Method 5 of 40 CFR part 60, appendix A-3.

\* \* \* \* \*

17. Table 1 to Subpart SSSSS is revised to read as follows:

**Table 1 to Subpart SSSSS of Part 63—Emission Limits**

As stated in §63.9788, you must comply with the emission limits for affected sources in the following table:

<b>For . . .</b>	<b>You must meet the following emission limits . . .</b>
1. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank	As specified in items 2 through 9 of this table.
2. Continuous process units that are controlled with a thermal or catalytic oxidizer	a. The 3-hour block average THC concentration must not exceed 20 parts per million by volume, dry basis (ppmvd), corrected to 18 percent oxygen, at the outlet of the control device; or
	b. The 3-hour block average THC mass emissions rate must be reduced by at least 95 percent.
3. Continuous process units that are equipped with a control device other than a thermal or catalytic oxidizer	a. The 3-hour block average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the control device; or

For . . .	You must meet the following emission limits . . .
	b. The 3-hour block average THC mass emissions rate must be reduced by at least 95 percent.
4. Continuous process units that use process changes to reduce organic HAP emissions	The 3-hour block average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the process gas stream.
5. Continuous kilns that are not equipped with a control device	The 3-hour block average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the process gas stream.
6. Batch process units that are controlled with a thermal or catalytic oxidizer	a. The 2-run block average THC concentration for the 3-hour peak emissions period must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the control device; or
	b. The 2-run block average THC mass emissions rate for the 3-hour peak emissions period must be reduced by at least 95 percent.
7. Batch process units that are equipped with a control device other than a thermal or catalytic oxidizer	a. The 2-run block average THC concentration for the 3-hour peak emissions period must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the control device; or
	b. The 2-run block average THC mass emissions rate for the 3-hour peak emissions period must be reduced by at least 95 percent.
8. Batch process units that use process changes to reduce organic HAP emissions	The 2-run block average THC concentration for the 3-hour peak emissions period must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the process gas stream.
9. Batch process kilns that are not equipped with a control device	The 2-run block average THC concentration for the 3-hour peak emissions period must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the process gas stream.

For . . .	You must meet the following emission limits . . .
10. Each new continuous kiln that is used to produce clay refractory products	a. The 3-hour block average HF emissions must not exceed 0.019 kilograms per megagram (kg/Mg) (0.038 pounds per ton (lb/ton)) of uncalcined clay processed, OR the 3-hour block average HF mass emissions rate must be reduced by at least 90 percent; and
	b. The 3-hour block average HCl emissions must not exceed 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed, OR the 3-hour block average HCl mass emissions rate must be reduced by at least 30 percent; and
	c. The 3-hour block average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr); and
	d. The 3-hour block average Hg concentration must not exceed 6.1 micrograms per dry standard cubic meter ( $\mu\text{g/dscm}$ ), corrected to 18 percent oxygen, at the outlet of the control device or the process gas stream.
11. Each new batch process kiln that is used to produce clay refractory products	a. The 2-run block average HF mass emissions rate for the 3-hour peak emissions period must be reduced by at least 90 percent; and
	b. The 2-run block average HCl mass emissions rate for the 3-hour peak emissions period must be reduced by at least 30 percent; and
	c. The 2-run block average PM emissions for the 3-hour peak emissions period must not exceed 1.4 kg/Mg (3.1 lb/hr); and
	d. The 2-run block average Hg concentration for the 3-hour peak emissions period must not exceed 6.1 $\mu\text{g/dscm}$ , corrected to 18 percent oxygen, at the outlet of the control device or the process gas stream.



<b>For . . .</b>	<b>You must meet the following emission limits . . .</b>
12. Each existing continuous kiln that is used to produce clay refractory products on and after <b>[INSERT DATE 1 YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	a. The 3-hour block average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr); and
	b. The 3-hour block average Hg concentration must not exceed 18 µg/dscm, corrected to 18 percent oxygen, at the outlet of the control device or the process gas stream.
13. Each existing batch kiln that is used to produce clay refractory products on and after <b>[INSERT DATE 1 YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	a. The 2-run block average PM emissions for the 3-hour peak emissions period must not exceed 4.3 kg/Mg (9.5 lb/hr); and
	b. The 2-run block average Hg concentration for the 3-hour peak emissions period must not exceed 18 µg/dscm, corrected to 18 percent oxygen, at the outlet of the control device or the process gas stream.

18. Table 2 to Subpart SSSSS is revised to read as follows:

**Table 2 to Subpart SSSSS of Part 63—Operating Limits**

As stated in §63.9788, you must comply with the operating limits for affected sources in the following table:

<b>For . . .</b>	<b>You must . . .</b>
1. Each affected source listed in Table 1 to this subpart	a. Operate all affected sources according to the requirements to this subpart on and after the date on which the initial performance test is conducted or required to be conducted, whichever date is earlier; and
	b. Capture emissions and vent them through a closed system; and

For . . .	You must . . .
	c. Operate each control device that is required to comply with this subpart on each affected source during all periods that the source is operating, except where specified in §63.9792(e), item 2 of this table, item 5 of Table 3 to this subpart, item 13 of Table 4 to this subpart, and item 6 of Table 9 to this subpart for THC control devices on continuous kilns used to manufacture refractory products that use organic HAP; and
	d. Record all operating parameters specified in Table 8 to this subpart for the affected source; and
	e. Prepare and implement a written OM&M plan as specified in §63.9792(d).
2. Each affected continuous kiln used to manufacture refractory products that use organic HAP that is equipped with an emission control device for THC	a. Receive approval from the Administrator before taking the control device on the affected kiln out of service for scheduled maintenance, as specified in §63.9792(e); and
	b. Before <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , minimize HAP emissions from the affected kiln during all periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service; on and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , you must minimize HAP emissions during the period when the kiln is operating and the control device is out of service by complying with the applicable standard in Table 3 to this subpart; and
	c. Minimize the duration of all periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service. On and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , the total time during which the kiln is operating and the control device is out of service for the each year on a 12-month rolling basis must not exceed 750 hours.

<b>For . . .</b>	<b>You must . . .</b>
3. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank	Satisfy the applicable operating limits specified in items 4 through 9 of this table.
4. Each affected continuous process unit	Maintain the 3-hour block average organic HAP processing rate (pounds per hour) at or below the maximum organic HAP processing rate established during the most recent performance test.
5. Continuous process units that are equipped with a thermal oxidizer	Maintain the 3-hour block average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature for the oxidizer established during the most recent performance test.
6. Continuous process units that are equipped with a catalytic oxidizer	a. Maintain the 3-hour block average operating temperature at the inlet of the catalyst bed of the oxidizer at or above the minimum allowable operating temperature for the oxidizer established during the most recent performance test; and
	b. Check the activity level of the catalyst at least every 12 months.
7. Each affected batch process unit	For each batch cycle, maintain the organic HAP processing rate (pounds per batch) at or below the maximum organic HAP processing rate established during the most recent performance test.

<b>For . . .</b>	<b>You must . . .</b>
8. Batch process units that are equipped with a thermal oxidizer	a. From the start of each batch cycle until 3 hours have passed since the process unit reached maximum temperature, maintain the hourly average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature established for the corresponding period during the most recent performance test, as determined according to item 11 of Table 4 to this subpart; and
	b. For each subsequent hour of the batch cycle, maintain the hourly average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature established for the corresponding hour during the most recent performance test, as specified in item 13 of Table 4 to this subpart.
9. Batch process units that are equipped with a catalytic oxidizer	a. From the start of each batch cycle until 3 hours have passed since the process unit reached maximum temperature, maintain the hourly average operating temperature at the inlet of the catalyst bed at or above the minimum allowable operating temperature established for the corresponding period during the most recent performance test, as determined according to item 12 of Table 4 to this subpart; and
	b. For each subsequent hour of the batch cycle, maintain the hourly average operating temperature at the inlet of the catalyst bed at or above the minimum allowable operating temperature established for the corresponding hour during the most recent performance test, as specified in item 13 of Table 4 to this subpart; and
	c. Check the activity level of the catalyst at least every 12 months.
10. Each new kiln that is used to process clay refractory products	Satisfy the applicable operating limits specified in items 11 through 13 of this table.
11. Each affected kiln that is equipped with a DLA	a. Maintain the 3-hour block average pressure drop across the DLA at or above the minimum levels established during the most recent performance test; and

For . . .	You must . . .
	b. Maintain free-flowing limestone in the feed hopper, silo, and DLA at all times; and
	c. Maintain the limestone feeder at or above the level established during the most recent performance test; and
	d. Use the same grade of limestone from the same source as was used during the most recent performance test and maintain records of the source and type of limestone used; and
	e. Maintain no VE from the stack.
12. Each affected kiln that is equipped with a DIFF or DLS/FF	a. Initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with the OM&M plan; and
	b. Verify at least once each 8-hour shift that lime is free-flowing by means of a visual check, checking the output of a load cell, carrier gas/lime flow indicator, or carrier gas pressure drop measurement system; and
	c. Record the lime feeder setting daily to verify that the feeder setting is at or above the level established during the most recent performance test.
13. Each affected kiln that is equipped with a wet scrubber	a. Maintain the 3-hour block average pressure drop across the scrubber, liquid pH, and liquid flow rate at or above the minimum levels established during the most recent performance test; and
	b. If chemicals are added to the scrubber liquid, maintain the 3-hour block average chemical feed rate at or above the minimum chemical feed rate established during the most recent performance test.
14. Each new and existing kiln used to process clay refractory products that is equipped with an activated carbon injection system	Maintain the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.
15. Each new and existing kiln that is used to process clay refractory products with no add-on control and each existing kiln that is equipped with a DLA	Maintain no VE from the stack.

<b>For . . .</b>	<b>You must . . .</b>
16. Each existing kiln used to process clay refractory products that is equipped with a FF	Initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with the OM&M plan OR maintain no VE from the stack.
17. Each existing kiln used to process clay refractory products that is equipped with a wet scrubber	Maintain the 3-hour block average pressure drop across the scrubber and liquid flow rate at or above the minimum levels established during the most recent performance test.

19. Table 3 to Subpart SSSSS is revised to read as follows:

**Table 3 to Subpart SSSSS of Part 63—Work Practice Standards**

As stated in §63.9788, you must comply with the work practice standards for affected sources in the following table:

<b>For . . .</b>	<b>You must . . .</b>	<b>According to one of the following requirements . . .</b>
1. Each basket or container that is used for holding fired refractory shapes in an existing shape preheater and autoclave during the pitch impregnation process	a. Control POM emissions from any affected shape preheater	i. At least every 10 preheating cycles, clean the residual pitch from the surfaces of the basket or container by abrasive blasting prior to placing the basket or container in the affected shape preheater; or
		ii. At least every 10 preheating cycles, subject the basket or container to a thermal process cycle that meets or exceeds the operating temperature and cycle time of the affected preheater, AND is conducted in a process unit that is exhausted to a thermal or catalytic oxidizer that is comparable to the control device used on an affected defumer or coking oven; or
		iii. Capture emissions from the affected shape preheater and vent them to the control device that is used to control emissions from an affected defumer or coking oven, or to a comparable thermal or catalytic oxidizer.

<b>For . . .</b>	<b>You must . . .</b>	<b>According to one of the following requirements . . .</b>
2. Each new or existing pitch working tank	Control POM emissions	Capture emissions from the affected pitch working tank and vent them to the control device that is used to control emissions from an affected defumer or coking oven, OR to a comparable thermal or catalytic oxidizer.
3. Each new or existing chromium refractory products kiln	Minimize fuel-based HAP emissions	Before <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , use natural gas, or equivalent, as the kiln fuel, except during periods of natural gas curtailment or supply interruption, as defined in §63.9824. On and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , use natural gas, or equivalent, as the kiln fuel at all times.
4. Each existing clay refractory products kiln	Minimize fuel-based HAP emissions	Before <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , use natural gas, or equivalent, as the kiln fuel, except during periods of natural gas curtailment or supply interruption, as defined in §63.9824. On and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , use natural gas, or equivalent, as the kiln fuel at all times.
5. Each affected continuous kiln used to manufacture refractory products that use organic HAP that is equipped with an emission control device for THC with Administrator approval to take the control device out of service for scheduled maintenance, as specified in §63.9792(e)	Minimize HAP emissions	i. Before <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , minimize HAP emissions from the affected kiln during all periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service consistent with your OM&M plan and minimize the time period during which the kiln is operating and the control device is out of service; or

For . . .	You must . . .	According to one of the following requirements . . .
		ii. On and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , minimize HAP emissions during the period when the kiln is operating and the control device is out of service by maintaining the organic HAP processing rate (lb/hr) below the average organic HAP processing rate based on actual production on a 6-month rolling basis (not to include periods of kiln shut down) or below the organic HAP processing rate (lb/hr) that coincides with the lowest hour of the most recent 3-hour performance test, whichever is lower); and minimize the time period during which the kiln is operating and the control device is out of service, not to exceed 750 hours for the year (on a 12-month rolling basis).
6. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP, on and after <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	Minimize fuel-based HAP emissions	Use natural gas, or equivalent, as the kiln fuel, at all times.

20. Table 4 to Subpart SSSSS is revised to read as follows:

**Table 4 to Subpart SSSSS to Part 63—Requirements for Performance Tests**

As stated in §63.9800, you must comply with the requirements for performance tests for affected sources in the following table:



<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
1. Each affected source listed in Table 1 to this subpart	a. Conduct performance tests	i. The requirements of the general provisions in subpart A of this part and the requirements to this subpart	(1) Record the date of the test; and
			(2) Identify the emission source that is tested; and
			(3) Collect and record the corresponding operating parameter and emission test data listed in this table for each run of the performance test; and
			(4) Repeat the performance test at least every 5 years; and
			(5) Repeat the performance test before changing the parameter value for any operating limit specified in your OM&M plan; and
			(6) If complying with the THC concentration or THC percentage reduction limits specified in items 2 through 9 of Table 1 to this subpart, repeat the performance test under the conditions specified in items 2.a.2. and 2.a.3. of this table; and

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
			(7) If complying with the emission limits for new clay refractory products kilns specified in items 10 and 11 of Table 1 to this subpart, repeat the performance test under the conditions specified in items 14.a.i.4. and 17.a.i.4. of this table.
	b. Select the locations of sampling ports and the number of traverse points	i. Method 1 or 1A of 40 CFR part 60, appendix A-1	(1) To demonstrate compliance with the percentage reduction limits specified in items 2.b., 3.b., 6.b., 7.b., 10, and 11 of Table 1 to this subpart, locate sampling sites at the inlet of the control device and at either the outlet of the control device or at the stack prior to any releases to the atmosphere; and
			(2) To demonstrate compliance with any other emission limit specified in Table 1 to this subpart, locate all sampling sites at the outlet of the control device or at the stack prior to any releases to the atmosphere.
	c. Determine gas velocity and volumetric flow rate	Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A-1 and A-2	Measure gas velocities and volumetric flow rates at 1-hour intervals throughout each test run.
	d. Conduct gas molecular weight analysis	i. Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2; or	As specified in the applicable test method.

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
		ii. ASME PTC 19.10-1981-Part 10 <sup>a</sup>	You may use the manual procedures (but not instrumental procedures) of ASME PTC 19.10-1981-Part 10 <sup>a</sup> as an alternative to EPA Method 3B.
	e. Measure gas moisture content	Method 4 of 40 CFR part 60, appendix A-3	As specified in the applicable test method.
2. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank	a. Conduct performance tests		(1) Conduct the performance test while the source is operating at the maximum organic HAP processing rate, as defined in §63.9824, reasonably expected to occur; and

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
			(2) Repeat the performance test before starting production of any product for which the organic HAP processing rate is likely to exceed the maximum organic HAP processing rate established during the most recent performance test by more than 10 percent, as specified in §63.9798(c); and
			(3) Repeat the performance test on any affected uncontrolled kiln following process changes (e.g., shorter curing oven cycle time) that could increase organic HAP emissions from the affected kiln, as specified in §63.9798(d).
	b. Satisfy the applicable requirements listed in items 3 through 13 of this table		
3. Each affected continuous process unit	a. Perform a minimum of 3 test runs	The appropriate test methods specified in items 1, 4, and 5 of this table	Each test run must be at least 1 hour in duration.

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
	b. Establish the operating limit for the maximum organic HAP processing rate	i. Method 311 of 40 CFR part 63, appendix A, OR material safety data sheets (MSDS), OR product labels to determine the mass fraction of organic HAP in each resin, binder, or additive; and	(1) Calculate and record the organic HAP content of all refractory shapes that are processed during the performance test, based on the mass fraction of organic HAP in the resins, binders, or additives; the mass fraction of each resin, binder, or additive, in the product; and the process feed rate; and
		ii. Product formulation data that specify the mass fraction of each resin, binder, and additive in the products that are processed during the performance test; and	(2) Calculate and record the organic HAP processing rate (pounds per hour) for each test run; and
		iii. Process feed rate data (tons per hour)	(3) Calculate and record the maximum organic HAP processing rate as the average of the organic HAP processing rates for the three test runs.
	c. Record the operating temperature of the affected source	Process data	During each test run and at least once per hour, record the operating temperature in the highest temperature zone of the affected source.
4. Each continuous process unit that is subject to the THC emission limit listed in item 2.a., 3.a., 4, or 5 of Table 1 to this subpart	a. Measure THC concentrations at the outlet of the control device or in the stack	i. Method 25A of 40 CFR part 60, appendix A-7	(1) Each minute, measure and record the concentrations of THC in the exhaust stream; and

For . . .	You must . . .	Using . . .	According to the following requirements . . .
			(2) Provide at least 50 1-minute measurements for each valid hourly average THC concentration.
	b. Measure oxygen concentrations at the outlet of the control device or in the stack	i. Method 3A of 40 CFR part 60, appendix A-2	(1) Each minute, measure and record the concentrations of oxygen in the exhaust stream; and
			(2) Provide at least 50 1-minute measurements for each valid hourly average THC concentration.
	c. Determine the hourly average THC concentration, corrected to 18 percent oxygen	i. Equation 1 of §63.9800(g)(1); and ii. The 1-minute THC and oxygen concentration data	(1) Calculate the hourly average THC concentration for each hour of the performance test as the average of the 1-minute THC measurements; and
			(2) Calculate the hourly average oxygen concentration for each hour of the performance test as the average of the 1-minute oxygen measurements; and
			(3) Correct the hourly average THC concentrations to 18 percent oxygen using Equation 1 of §63.9800(g)(1).
	d. Determine the 3-hour block average THC emission concentration, corrected to 18 percent oxygen	The hourly average concentration of THC, corrected to 18 percent oxygen, for each test run	Calculate the 3-hour block average THC emission concentration, corrected to 18 percent oxygen, as the average of the hourly average THC emission concentrations, corrected to 18 percent oxygen.

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
5. Each continuous process unit that is subject to the THC percentage reduction limit listed in item 2.b. or 3.b. of Table 1 to this subpart	a. Measure THC concentrations at the inlet and outlet of the control device	i. Method 25A of 40 CFR part 60, appendix A-7	(1) Each minute, measure and record the concentrations of THC at the inlet and outlet of the control device; and
			(2) Provide at least 50 1-minute measurements for each valid hourly average THC concentration at the control device inlet and outlet.
	b. Determine the hourly THC mass emissions rates at the inlet and outlet of the control device	i. The 1-minute THC concentration data at the control device inlet and outlet; and ii. The volumetric flow rates at the control device inlet and outlet	Calculate the hourly THC mass emissions rates at the control device inlet and outlet for each hour of the performance test.
	c. Determine the 3-hour block average THC percentage reduction	i. The hourly THC mass emissions rates at the inlet and outlet of the control device	(1) Calculate the hourly THC percentage reduction for each hour of the performance test using Equation 2 of §63.9800(g)(1); and
			(2) Calculate the 3-hour block average THC percentage reduction.
6. Each continuous process unit that is equipped with a thermal oxidizer	a. Establish the operating limit for the minimum allowable thermal oxidizer combustion chamber temperature	i. Continuous recording of the output of the combustion chamber temperature measurement device	(1) At least every 15 minutes, measure and record the thermal oxidizer combustion chamber temperature; and
			(2) Provide at least one measurement during at least three 15-minute periods per hour of testing; and

For . . .	You must . . .	Using . . .	According to the following requirements . . .
			(3) Calculate the hourly average thermal oxidizer combustion chamber temperature for each hour of the performance test; and
			(4) Calculate the minimum allowable combustion chamber temperature as the average of the combustion chamber temperatures for the three test runs, minus 14 °C (25 °F).
7. Each continuous process unit that is equipped with a catalytic oxidizer	a. Establish the operating limit for the minimum allowable temperature at the inlet of the catalyst bed	i. Continuous recording of the output of the temperature measurement device	(1) At least every 15 minutes, measure and record the temperature at the inlet of the catalyst bed; and
			(2) Provide at least one catalyst bed inlet temperature measurement during at least three 15-minute periods per hour of testing; and
			(3) Calculate the hourly average catalyst bed inlet temperature for each hour of the performance test; and
			(4) Calculate the minimum allowable catalyst bed inlet temperature as the average of the catalyst bed inlet temperatures for the three test runs, minus 14 °C (25 °F).



<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
8. Each affected batch process unit	a. Perform a minimum of two test runs	i. The appropriate test methods specified in items 1, 9, and 10 of this table	(1) Each test run must be conducted over a separate batch cycle unless you satisfy the requirements of §63.9800(f)(3) and (4); and
			(2) Each test run must begin with the start of a batch cycle, except as specified in item 8.a.i.4. of this table; and
			(3) Each test run must continue until the end of the batch cycle, except as specified in items 8.a.i.4. and 8.a.i.5. of this table; and
			(4) If you develop an emissions profile, as described in §63.9802(a), AND for sources equipped with a thermal or catalytic oxidizer, you do not reduce the oxidizer operating temperature, as specified in item 13 of this table, you can limit each test run to the 3-hour peak THC emissions period; and

For . . .	You must . . .	Using . . .	According to the following requirements . . .
			<p>(5) If you do not develop an emissions profile, a test run can be stopped, and the results of that run considered complete, if you measure emissions continuously until at least 3 hours after the affected process unit has reached maximum temperature, AND the hourly average THC mass emissions rate has not increased during the 3-hour period since maximum process temperature was reached, and the hourly average concentrations of THC at the inlet of the control device have not exceeded 20 ppmvd, corrected to 18 percent oxygen, during the 3-hour period since maximum process temperature was reached or the hourly average THC percentage reduction has been at least 95 percent during the 3-hour period since maximum process temperature was reached, AND, for sources equipped with a thermal or catalytic oxidizer, at least 1 hour has passed since any reduction in the operating temperature of the oxidizer, as specified in item 13 of this table.</p>

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
	b. Establish the operating limit for the maximum organic HAP processing rate	i. Method 311 of 40 CFR part 63, appendix A, OR MSDS, OR product labels to determine the mass fraction of organic HAP in each resin, binder, or additive; and	(1) Calculate and record the organic HAP content of all refractory shapes that are processed during the performance test, based on the mass fraction of HAP in the resins, binders, or additives; the mass fraction of each resin, binder, or additive, in the product, and the batch weight prior to processing; and
		ii. Product formulation data that specify the mass fraction of each resin, binder, and additive in the products that are processed during the performance test; and iii. Batch weight (tons)	(2) Calculate and record the organic HAP processing rate (pounds per batch) for each test run; and (3) Calculate and record the maximum organic HAP processing rate as the average of the organic HAP processing rates for the two test runs.
	c. Record the batch cycle time	Process data	Record the total elapsed time from the start to the completion of the batch cycle.
	d. Record the operating temperature of the affected source	Process data	Record the operating temperature of the affected source at least once every hour from the start to the completion of the batch cycle.
9. Each batch process unit that is subject to the THC emission limit listed in item 6.a., 7.a., 8, or 9 of Table 1 to this subpart	a. Measure THC concentrations at the outlet of the control device or in the stack	i. Method 25A of 40 CFR part 60, appendix A-7	(1) Each minute, measure and record the concentrations of THC in the exhaust stream; and

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
			(2) Provide at least 50 1-minute measurements for each valid hourly average THC concentration.
	b. Measure oxygen concentrations at the outlet of the control device or in the stack	i. Method 3A of 40 CFR part 60, appendix A-2	(1) Each minute, measure and record the concentrations of oxygen in the exhaust stream; and
			(2) Provide at least 50 1-minute measurements for each valid hourly average oxygen concentration.
	c. Determine the hourly average THC concentration, corrected to 18 percent oxygen	i. Equation 1 of §63.9800(g)(1); and ii. The 1-minute THC and oxygen concentration data	(1) Calculate the hourly average THC concentration for each hour of the performance test as the average of the 1-minute THC measurements; and
			(2) Calculate the hourly average oxygen concentration for each hour of the performance test as the average of the 1-minute oxygen measurements; and
			(3) Correct the hourly average THC concentrations to 18 percent oxygen using Equation 1 of §63.9800(g)(1).

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
	d. Determine the 3-hour peak THC emissions period for each test run	The hourly average THC concentrations, corrected to 18 percent oxygen	Select the period of 3 consecutive hours over which the sum of the hourly average THC concentrations, corrected to 18 percent oxygen, is greater than the sum of the hourly average THC emission concentrations, corrected to 18 percent oxygen, for any other period of 3 consecutive hours during the test run.
	e. Determine the average THC concentration, corrected to 18 percent oxygen, for each test run	The hourly average THC emission concentrations, corrected to 18 percent oxygen, for the 3-hour peak THC emissions period	Calculate the average of the hourly average THC concentrations, corrected to 18 percent oxygen, for the 3 hours of the peak emissions period for each test run.
	f. Determine the 2-run block average THC concentration, corrected to 18 percent oxygen, for the emission test	The average THC concentration, corrected to 18 percent oxygen, for each test run	Calculate the average of the average THC concentrations, corrected to 18 percent oxygen, for each run.
10. Each batch process unit that is subject to the THC percentage reduction limit listed in item 6.b. or 7.b. of Table 1 to this subpart	a. Measure THC concentrations at the inlet and outlet of the control device	i. Method 25A of 40 CFR part 60, appendix A-7	(1) Each minute, measure and record the concentrations of THC at the control device inlet and outlet; and
			(2) Provide at least 50 1-minute measurements for each valid hourly average THC concentration at the control device inlet and outlet.

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
	b. Determine the hourly THC mass emissions rates at the control device inlet and outlet	i. The 1-minute THC concentration data at the control device inlet and outlet; and ii. The volumetric flow rates at the control device inlet and outlet	(1) Calculate the hourly mass emissions rates at the control device inlet and outlet for each hour of the performance test.
	c. Determine the 3-hour peak THC emissions period for each test run	The hourly THC mass emissions rates at the control device inlet	Select the period of 3 consecutive hours over which the sum of the hourly THC mass emissions rates at the control device inlet is greater than the sum of the hourly THC mass emissions rates at the control device inlet for any other period of 3 consecutive hours during the test run.
	d. Determine the average THC percentage reduction for each test run	i. Equation 2 of §63.9800(g)(2); and ii. The hourly THC mass emissions rates at the control device inlet and outlet for the 3-hour peak THC emissions period	Calculate the average THC percentage reduction for each test run using Equation 2 of §63.9800(g)(2).
	e. Determine the 2-run block average THC percentage reduction for the emission test	The average THC percentage reduction for each test run	Calculate the average of the average THC percentage reductions for each test run.
11. Each batch process unit that is equipped with a thermal oxidizer	a. Establish the operating limit for the minimum thermal oxidizer combustion chamber temperature	i. Continuous recording of the output of the combustion chamber temperature measurement device	(1) At least every 15 minutes, measure and record the thermal oxidizer combustion chamber temperature; and

For . . .	You must . . .	Using . . .	According to the following requirements . . .
			(2) Provide at least one temperature measurement during at least three 15-minute periods per hour of testing; and
			(3) Calculate the hourly average combustion chamber temperature for each hour of the 3-hour peak emissions period, as defined in item 9.d. or 10.c. of this table, whichever applies; and
			(4) Calculate the minimum allowable thermal oxidizer combustion chamber operating temperature as the average of the hourly combustion chamber temperatures for the 3-hour peak emissions period, minus 14 °C (25 °F).
12. Each batch process unit that is equipped with a catalytic oxidizer	a. Establish the operating limit for the minimum temperature at the inlet of the catalyst bed	i. Continuous recording of the output of the temperature measurement device	(1) At least every 15 minutes, measure and record the temperature at the inlet of the catalyst bed; and
			(2) Provide at least one catalyst bed inlet temperature measurement during at least three 15-minute periods per hour of testing; and

For . . .	You must . . .	Using . . .	According to the following requirements . . .
			(3) Calculate the hourly average catalyst bed inlet temperature for each hour of the 3-hour peak emissions period, as defined in item 9.d. or 10.c. of this table, whichever applies; and
			(4) Calculate the minimum allowable catalytic oxidizer catalyst bed inlet temperature as the average of the hourly catalyst bed inlet temperatures for the 3-hour peak emissions period, minus 14 °C (25 °F).
13. Each batch process unit that is equipped with a thermal or catalytic oxidizer	a. During each test run, maintain the applicable operating temperature of the oxidizer until emission levels allow the oxidizer to be shut off or the operating temperature of the oxidizer to be reduced		(1) The oxidizer can be shut off or the oxidizer operating temperature can be reduced if you do not use an emission profile to limit testing to the 3-hour peak emissions period, as specified in item 8.a.i.4. of this table; and
			(2) At least 3 hours have passed since the affected process unit reached maximum temperature; and
			(3) The applicable emission limit specified in item 6.a. or 6.b. of Table 1 to this subpart was met during each of the previous three 1-hour periods; and



<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
			(4) The hourly average THC mass emissions rate did not increase during the 3-hour period since maximum process temperature was reached; and
			(5) The applicable emission limit specified in item 6.a. and 6.b. of Table 1 to this subpart was met during each of the four 15-minute periods immediately following the oxidizer temperature reduction; and
			(6) If the applicable emission limit specified in item 6.a. or 6.b. of Table 1 to this subpart was not met during any of the four 15-minute periods immediately following the oxidizer temperature reduction, you must return the oxidizer to its normal operating temperature as soon as possible and maintain that temperature for at least 1 hour; and
			(7) Continue the test run until the applicable emission limit specified in items 6.a. and 6.b. of Table 1 to this subpart is met for at least four consecutive 15-minute periods that immediately follow the temperature reduction; and

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
			(8) Calculate the hourly average oxidizer operating temperature for each hour of the performance test since the affected process unit reached maximum temperature.
14. Each new continuous kiln that is used to process clay refractory products	a. Measure emissions of HF and HCl	i. Method 26A of 40 CFR part 60, appendix A-8; or ii. Method 26 of 40 CFR part 60, appendix A-8; or iii. Method 320 of 40 CFR part 63, appendix A	(1) Conduct the test while the kiln is operating at the maximum production level; and (2) You may use EPA Method 26 of 40 CFR part 60, appendix A-8, only if no acid PM (e.g., HF or HCl dissolved in water droplets emitted by sources controlled by a wet scrubber) is present; and

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
			(3) If you use EPA Method 320 of 40 CFR part 63, appendix A, you must follow the analyte spiking procedures of Section 13 of EPA Method 320 unless you can demonstrate that the complete spiking procedure has been conducted at a similar source. ASTM D6348-12e1 <sup>a</sup> may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1-A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent; and
			(4) Repeat the performance test if the affected source is controlled with a DLA and you change the source of the limestone used in the DLA.
	b. Perform a minimum of 3 test runs	The appropriate test methods specified in items 1 and 14.a. of this table	Each test run must be at least 1 hour in duration.

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
15. Each new continuous kiln that is subject to the production-based HF and HCl emission limits specified in items 10.a. and 10.b. of Table 1 to this subpart	a. Record the uncalcined clay processing rate	i. Production data; and ii. Product formulation data that specify the mass fraction of uncalcined clay in the products that are processed during the performance test	(1) Record the production rate (tons per hour of fired product); and (2) Calculate and record the average rate at which uncalcined clay is processed (tons per hour) for each test run; and (3) Calculate and record the 3-run average uncalcined clay processing rate as the average of the average uncalcined clay processing rates for each test run.
	b. Determine the HF mass emissions rate at the outlet of the control device or in the stack	i. Method 26A of 40 CFR part 60, appendix A-8; or ii. Method 26 of 40 CFR part 60, appendix A-8; or iii. Method 320 of 40 CFR part 63, appendix A	Calculate the HF mass emissions rate for each test. ASTM D6348-12e1 <sup>a</sup> may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1-A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent.
	c. Determine the 3-hour block average production-based HF emissions rate	i. The HF mass emissions rate for each test run; and ii. The average uncalcined clay processing rate	(1) Calculate the hourly production-based HF emissions rate for each test run using Equation 3 of §63.9800(g)(3); and

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
			(2) Calculate the 3-hour block average production-based HF emissions rate as the average of the hourly production-based HF emissions rates for each test run.
	d. Determine the HCl mass emissions rate at the outlet of the control device or in the stack	i. Method 26A of 40 CFR part 60, appendix A-8; or ii. Method 26 of 40 CFR part 60, appendix A-8; or iii. Method 320 of 40 CFR part 63, appendix A	Calculate the HCl mass emissions rate for each test run. ASTM D6348-12e1 <sup>a</sup> may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1-A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent.
	e. Determine the 3-hour block average production-based HCl emissions rate	i. The HCl mass emissions rate for each test run; and ii. The average uncalcined clay processing rate	(1) Calculate the hourly production-based HCl emissions rate for each test run using Equation 3 of §63.9800(g)(3); and
			(2) Calculate the 3-hour block average production-based HCl emissions rate as the average of the production-based HCl emissions rates for each test run.

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
16. Each new continuous kiln that is subject to the HF and HCl percentage reduction limits specified in items 10.a. and 10.b. of Table 1 to this subpart	a. Measure the HF mass emissions rates at the inlet and outlet of the control device	i. Method 26A of 40 CFR part 60, appendix A-8; or ii. Method 26 of 40 CFR part 60, appendix A-8; or iii. Method 320 of 40 CFR part 63, appendix A	Calculate the HF mass emissions rates at the control device inlet and outlet for each test run. ASTM D6348-12e1 <sup>a</sup> may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1-A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent.
	b. Determine the 3-hour block average HF percentage reduction	i. The HF mass emissions rates at the inlet and outlet of the control device for each test run	(1) Calculate the hourly HF percentage reduction using Equation 2 of §63.9800(g)(2); and
			(2) Calculate the 3-hour block average HF percentage reduction as the average of the HF percentage reductions for each test run.

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
	c. Measure the HCl mass emissions rates at the inlet and outlet of the control device	i. Method 26A of 40 CFR part 60, appendix A-8; or ii. Method 26 of 40 CFR part 60, appendix A-8; or iii. Method 320 of 40 CFR part 63, appendix A	Calculate the HCl mass emissions rates at the control device inlet and outlet for each test run. ASTM D6348-12e1 <sup>a</sup> may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1-A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent.
	d. Determine the 3-hour block average HCl percentage reduction.	i. The HCl mass emissions rates at the inlet and outlet of the control device for each test run	(1) Calculate the hourly HCl percentage reduction using Equation 2 of §63.9800(g)(2); and
			(2) Calculate the 3-hour block average HCl percentage reduction as the average of HCl percentage reductions for each test run.

For . . .	You must . . .	Using . . .	According to the following requirements . . .
17. Each new batch process kiln that is used to process clay refractory products	a. Measure emissions of HF and HCl at the inlet and outlet of the control device	i. Method 26A of 40 CFR part 60, appendix A-8; or ii. Method 26 of 40 CFR part 60, appendix A-8; or iii. Method 320 of 40 CFR part 63, appendix A	(1) Conduct the test while the kiln is operating at the maximum production level; and (2) You may use EPA Method 26 of 40 CFR part 60, appendix A, only if no acid PM (e.g., HF or HCl dissolved in water droplets emitted by sources controlled by a wet scrubber) is present; and (3) If you use EPA Method 320 of 40 CFR part 63, you must follow the analyte spiking procedures of Section 13 of EPA Method 320 unless you can demonstrate that the complete spiking procedure has been conducted at a similar source ASTM D6348-12e1 <sup>a</sup> may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1-A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent.; and



For . . .	You must . . .	Using . . .	According to the following requirements . . .
			(4) Repeat the performance test if the affected source is controlled with a DLA and you change the source of the limestone used in the DLA.
	b. Perform a minimum of 2 test runs	i. The appropriate test methods specified in items 1 and 17.a. of this table	(1) Each test run must be conducted over a separate batch cycle unless you satisfy the requirements of §63.9800(f)(3) and (4); and
			(2) Each test run must consist of a series of 1-hour runs at the inlet and outlet of the control device, beginning with the start of a batch cycle, except as specified in item 17.b.i.4. of this table; and
			(3) Each test run must continue until the end of the batch cycle, except as specified in item 17.b.i.4. of this table; and
			(4) If you develop an emissions profile, as described in §63.9802(b), you can limit each test run to the 3-hour peak HF emissions period.
	c. Determine the hourly HF and HCl mass emissions rates at the inlet and outlet of the control device	i. The appropriate test methods specified in items 1 and 17.a. of this table	Determine the hourly mass HF and HCl emissions rates at the inlet and outlet of the control device for each hour of each test run.

For . . .	You must . . .	Using . . .	According to the following requirements . . .
	d. Determine the 3-hour peak HF emissions period	The hourly HF mass emissions rates at the inlet of the control device	Select the period of 3 consecutive hours over which the sum of the hourly HF mass emissions rates at the control device inlet is greater than the sum of the hourly HF mass emissions rates at the control device inlet for any other period of 3 consecutive hours during the test run.
	e. Determine the 2-run block average HF percentage reduction for the emissions test	i. The hourly average HF emissions rates at the inlet and outlet of the control device	(1) Calculate the HF percentage reduction for each hour of the 3-hour peak HF emissions period using Equation 2 of §63.9800(g)(2); and
			(2) Calculate the average HF percentage reduction for each test run as the average of the hourly HF percentage reductions for the 3-hour peak HF emissions period for that run; and
			(3) Calculate the 2-run block average HF percentage reduction for the emission test as the average of the average HF percentage reductions for the two test runs.
	f. Determine the 2-run block average HCl percentage reduction for the emission test	i. The hourly average HCl emissions rates at the inlet and outlet of the control device	(1) Calculate the HCl percentage reduction for each hour of the 3-hour peak HF emissions period using Equation 2 §63.9800(g)(2); and

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
			(2) Calculate the average HCl percentage reduction for each test run as the average of the hourly HCl percentage reductions for the 3-hour peak HF emissions period for that run; and
			(3) Calculate the 2-run block average HCl percentage reduction for the emission test as the average of the average HCl percentage reductions for the two test runs.
18. Each new kiln that is used to process clay refractory products and is equipped with a DLA	a. Establish the operating limit for the minimum pressure drop across the DLA	Data from the pressure drop measurement device during the performance test	(1) At least every 15 minutes, measure the pressure drop across the DLA; and
			(2) Provide at least one pressure drop measurement during at least three 15-minute periods per hour of testing; and
			(3) Calculate the hourly average pressure drop across the DLA for each hour of the performance test; and
			(4) Calculate and record the minimum pressure drop as the average of the hourly average pressure drops across the DLA for the two or three test runs, whichever applies.

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
	b. Establish the operating limit for the limestone feeder setting	Data from the limestone feeder during the performance test	(1) Ensure that limestone in the feed hopper, silo, and DLA is free-flowing at all times during the performance test; and
			(2) Establish the limestone feeder setting 1 week prior to the performance test; and
			(3) Record and maintain the feeder setting for the 1-week period that precedes the performance test and during the performance test.
19. Each new kiln that is used to process clay refractory products and is equipped with a DIFF or DLS/FF	a. Document conformance with specifications and requirements of the bag leak detection system	Data from the installation and calibration of the bag leak detection system	Submit analyses and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems as part of the Notification of Compliance Status.
	b. Establish the operating limit for the lime feeder setting	i. Data from the lime feeder during the performance test	(1) For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times during the performance test; and
			(2) Record the feeder setting for the three test runs; and
			(3) If the feed rate setting varies during the three test runs, calculate and record the average feed rate for the two or three test runs, whichever applies.

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
20. Each new kiln that is used to process clay refractory products and is equipped with a wet scrubber	a. Establish the operating limit for the minimum scrubber pressure drop	i. Data from the pressure drop measurement device during the performance test	(1) At least every 15 minutes, measure the pressure drop across the scrubber; and
			(2) Provide at least one pressure drop measurement during at least three 15-minute periods per hour of testing; and
			(3) Calculate the hourly average pressure drop across the scrubber for each hour of the performance test; and
			(4) Calculate and record the minimum pressure drop as the average of the hourly average pressure drops across the scrubber for the two or three test runs, whichever applies.
	b. Establish the operating limit for the minimum scrubber liquid pH	i. Data from the pH measurement device during the performance test	(1) At least every 15 minutes, measure scrubber liquid pH; and
			(2) Provide at least one pH measurement during at least three 15-minute periods per hour of testing; and
			(3) Calculate the hourly average pH values for each hour of the performance test; and

For . . .	You must . . .	Using . . .	According to the following requirements . . .
			(4) Calculate and record the minimum liquid pH as the average of the hourly average pH measurements for the two or three test runs, whichever applies.
	c. Establish the operating limit for the minimum scrubber liquid flow rate	i. Data from the flow rate measurement device during the performance test	(1) At least every 15 minutes, measure the scrubber liquid flow rate; and
			(2) Provide at least one flow rate measurement during at least three 15-minute periods per hour of testing; and
			(3) Calculate the hourly average liquid flow rate for each hour of the performance test; and
			(4) Calculate and record the minimum liquid flow rate as the average of the hourly average liquid flow rates for the two or three test runs, whichever applies.
	d. If chemicals are added to the scrubber liquid, establish the operating limit for the minimum scrubber chemical feed rate	i. Data from the chemical feed rate measurement device during the performance test	(1) At least every 15 minutes, measure the scrubber chemical feed rate; and
			(2) Provide at least one chemical feed rate measurement during at least three 15-minute periods per hour of testing; and

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
			(3) Calculate the hourly average chemical feed rate for each hour of the performance test; and
			(4) Calculate and record the minimum chemical feed rate as the average of the hourly average chemical feed rates for the two or three test runs, whichever applies.
21. Each new and existing kiln that is used to process clay refractory products that is subject to the PM limits specified in items 10.c, 11.c, 12.a, and 13.a of Table 1 to this subpart	Measure PM emissions	Method 5 of 40 CFR part 60, appendix A-3	
22. Each new and existing kiln that is used to process clay refractory products that is subject to the Hg limits specified in items 10.d, 11.d, 12.b, and 13.b of Table 1 to this subpart	Measure Hg emissions	Method 29 of 40 CFR part 60, appendix A-8	ASTM D6784-16 <sup>a</sup> may be used as an alternative to EPA Method 29 (portion for Hg only).

<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
23. Each new and existing kiln that is used to process clay refractory products and is equipped with an activated carbon injection system	Establish the operating limit for the average carbon flow rate	Data from the carbon flow rate measurement conducted during the Hg performance test	You must measure the carbon flow rate during each test run, determine and record the block average carbon flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded carbon flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific activated carbon flow rate operating limit.
24. Each existing kiln that is used to process clay refractory products and is equipped with a FF and a bag leak detection system	Document conformance with specifications and requirements of the bag leak detection system	Data from the installation and calibration of the bag leak detection system	Submit analyses and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems as part of the Notification of Compliance Status.
25. Each existing kiln that is used to process clay refractory products and is equipped with a wet scrubber	a. Establish the operating limit for the minimum scrubber pressure drop	i. Data from the pressure drop measurement device during the performance test	(1) At least every 15 minutes, measure the pressure drop across the scrubber; and
			(2) Provide at least one pressure drop measurement during at least three 15-minute periods per hour of testing; and



<b>For . . .</b>	<b>You must . . .</b>	<b>Using . . .</b>	<b>According to the following requirements . . .</b>
			(3) Calculate the hourly average pressure drop across the scrubber for each hour of the performance test; and
			(4) Calculate and record the minimum pressure drop as the average of the hourly average pressure drops across the scrubber for the two or three test runs, whichever applies.
	b. Establish the operating limit for the minimum scrubber liquid flow rate	i. Data from the flow rate measurement device during the performance test	(1) At least every 15 minutes, measure the scrubber liquid flow rate; and
			(2) Provide at least one flow rate measurement during at least three 15-minute periods per hour of testing; and
			(3) Calculate the hourly average liquid flow rate for each hour of the performance test; and
			(4) Calculate and record the minimum liquid flow rate as the average of the hourly average liquid flow rates for the two or three test runs, whichever applies.

<sup>a</sup>Incorporated by reference, see §63.14.

21. Table 5 to Subpart SSSSS is revised to read as follows:

**Table 5 to Subpart SSSSS of Part 63—Initial Compliance With Emission Limits**

As stated in §63.9806, you must show initial compliance with the emission limits for affected sources according to the following table:

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You have demonstrated compliance if . . .</b>
1. Each affected source listed in Table 1 to this subpart	a. Each applicable emission limit listed in Table 1 to this subpart	i. Emissions measured using the test methods specified in Table 4 to this subpart satisfy the applicable emission limits specified in Table 1 to this subpart; and
		ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the performance test period; and
		iii. You report the results of the performance test in the Notification of Compliance Status, as specified by §63.9812(e)(1) and (2).
2. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank	As specified in items 3 through 8 of this table	You have satisfied the applicable requirements specified in items 3 through 8 of this table.
3. Each affected continuous process unit that is subject to the THC emission concentration limit listed in item 2.a., 3.a., 4, or 5 of Table 1 to this subpart	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen	The 3-hour block average THC emission concentration measured during the performance test using EPA Methods 25A and 3A is equal to or less than 20 ppmvd, corrected to 18 percent oxygen.

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You have demonstrated compliance if . . .</b>
4. Each affected continuous process unit that is subject to the THC percentage reduction limit listed in item 2.b. or 3.b. of Table 1 to this subpart	The average THC percentage reduction must equal or exceed 95 percent	The 3-hour block average THC percentage reduction measured during the performance test using EPA Method 25A is equal to or greater than 95 percent.
5. Each affected batch process unit that is subject to the THC emission concentration limit listed in item 6.a., 7.a., 8, or 9 of Table 1 to this subpart	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen	The 2-run block average THC emission concentration for the 3-hour peak emissions period measured during the performance test using EPA Methods 25A and 3A is equal to or less than 20 ppmvd, corrected to 18 percent oxygen.
6. Each affected batch process unit that is subject to the THC percentage reduction limit listed in item 6.b. or 7.b. of Table 1 to this subpart	The average THC percentage reduction must equal or exceed 95 percent	The 2-run block average THC percentage reduction for the 3-hour peak emissions period measured during the performance test using EPA Method 25A is equal to or exceeds 95 percent.
7. Each affected continuous or batch process unit that is equipped with a control device other than a thermal or catalytic oxidizer and is subject to the emission limit listed in item 3 or 7 of Table 1 to this subpart	a. The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen; or b. The average THC percentage reduction must equal or exceed 95 percent	i. You have installed a THC CEMS at the outlet of the control device or in the stack of the affected source; and ii. You have satisfied the requirements of PS-8 of 40 CFR part 60, appendix B.
8. Each affected continuous or batch process unit that uses process changes to reduce organic HAP emissions and is subject to the emission limit listed in item 4 or 8 of Table 1 to this subpart	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen	i. You have installed a THC CEMS at the outlet of the control device or in the stack of the affected source; and ii. You have satisfied the requirements of PS-8 of 40 CFR part 60, appendix B.

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You have demonstrated compliance if . . .</b>
9. Each new continuous kiln that is used to process clay refractory products	a. The average HF emissions must not exceed 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed; OR the average uncontrolled HF emissions must be reduced by at least 90 percent	i. The 3-hour block average production-based HF emissions rate measured during the performance test using one of the methods specified in item 14.a.i. of Table 4 to this subpart is equal to or less than 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed; or
		ii. The 3-hour block average HF emissions reduction measured during the performance test is equal to or greater than 90 percent.
	b. The average HCl emissions must not exceed 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed; OR the average uncontrolled HCl emissions must be reduced by at least 30 percent	i. The 3-hour block average production-based HCl emissions rate measured during the performance test using one of the methods specified in item 14.a.i. of Table 4 to this subpart is equal to or less than 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed; or
		ii. The 3-hour block average HCl emissions reduction measured during the performance test is equal to or greater than 30 percent.
	c. The average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr)	i. The 3-hour block average PM emissions measured during the performance test using one of the methods specified in item 21 of Table 4 to this subpart is equal to or less than 1.4 kg/Mg (3.1 lb/hr).

For . . .	For the following emission limit . . .	You have demonstrated compliance if . . .
	d. The average Hg emissions must not exceed 6.1 µg/dscm at 18 percent oxygen	i. The 3-hour block average Hg emissions measured during the performance test using one of the methods specified in item 22 of Table 4 to this subpart is equal to or less than 6.1 µg/dscm at 18 percent oxygen.
10. Each new batch process kiln that is used to process clay refractory products	a. The average uncontrolled HF emissions must be reduced by at least 90 percent	The 2-run block average HF emission reduction measured during the performance test is equal to or greater than 90 percent.
	b. The average uncontrolled HCl emissions must be reduced by at least 30 percent	The 2-run block average HCl emissions reduction measured during the performance test is equal to or greater than 30 percent.
	c. The average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr)	i. The 2-run block average PM emissions measured during the performance test using one of the methods specified in item 21 of Table 4 to this subpart is equal to or less than 1.4 kg/Mg (3.1 lb/hr).
	d. The average Hg emissions must not exceed 6.1 µg/dscm at 18 percent oxygen	i. The 2-run block average Hg emissions measured during the performance test using one of the methods specified in item 22 of Table 4 to this subpart is equal to or less than 6.1 µg/dscm at 18 percent oxygen.
11. Each existing continuous kiln that is used to produce clay refractory products on and after <b>[INSERT DATE 1 YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	a. The average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr)	i. The 3-hour block average PM emissions measured during the performance test using one of the methods specified in item 21 of Table 4 to this subpart is equal to or less than 4.3 kg/Mg (9.5 lb/hr).

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You have demonstrated compliance if . . .</b>
	b. The average Hg emissions must not exceed 18 µg/dscm at 18 percent oxygen	i. The 3-hour block average Hg emissions measured during the performance test using one of the methods specified in item 22 of Table 4 to this subpart is equal to or less than 18 µg/dscm at 18 percent oxygen.
12. Each existing batch kiln that is used to produce clay refractory products on and after <b>[INSERT DATE 1 YEAR AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	a. The average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr)	i. The 2-run block average PM emissions measured during the performance test using one of the methods specified in item 21 of Table 4 to this subpart is equal to or less than 4.3 kg/Mg (9.5 lb/hr).
	b. The average Hg emissions must not exceed 18 µg/dscm at 18 percent oxygen	i. The 2-run block average Hg emissions measured during the performance test using one of the methods specified in item 22 of Table 4 to this subpart is equal to or less than 18 µg/dscm at 18 percent oxygen.

22. Table 6 to Subpart SSSSS is revised to read as follows:

**Table 6 to Subpart SSSSS of Part 63—Initial Compliance With Work Practice Standards**

As stated in §63.9806, you must show initial compliance with the work practice standards for affected sources according to the following table:

<b>For each . . .</b>	<b>For the following standard . . .</b>	<b>You have demonstrated initial compliance if . . .</b>
1. Each affected source listed in Table 3 to this subpart	a. Each applicable work practice standard listed in Table 3 to this subpart	i. You have selected a method for performing each of the applicable work practice standards listed in Table 3 to this subpart; and

<b>For each . . .</b>	<b>For the following standard . . .</b>	<b>You have demonstrated initial compliance if . . .</b>
		ii. You have included in your Initial Notification a description of the method selected for complying with each applicable work practice standard, as required by §63.9(b); and
		iii. You submit a signed statement with the Notification of Compliance Status that you have implemented the applicable work practice standard listed in Table 3 to this subpart; and
		iv. You have described in your OM&M plan the method for complying with each applicable work practice standard specified in Table 3 to this subpart.
2. Each basket or container that is used for holding fired refractory shapes in an existing shape preheater and autoclave during the pitch impregnation process	a. Control POM emissions from any affected shape preheater	i. You have implemented at least one of the work practice standards listed in item 1 of Table 3 to this subpart; and
		ii. You have established a system for recording the date and cleaning method for each time you clean an affected basket or container.
3. Each affected new or existing pitch working tank	Control POM emissions	You have captured and vented emissions from the affected pitch working tank to the device that is used to control emissions from an affected defumer or coking oven, or to a thermal or catalytic oxidizer that is comparable to the control device used on an affected defumer or coking oven.
4. Each new or existing chromium refractory products kiln	Minimize fuel-based HAP emissions	You use natural gas, or equivalent, as the kiln fuel.
5. Each existing clay refractory products kiln	Minimize fuel-based HAP emissions	You use natural gas, or equivalent, as the kiln fuel.

<b>For each . . .</b>	<b>For the following standard . . .</b>	<b>You have demonstrated initial compliance if . . .</b>
6. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP, on and after [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]	Minimize fuel-based HAP emissions	You use natural gas, or equivalent, as the kiln fuel.

23. Table 7 to Subpart SSSSS is revised to read as follows:

**Table 7 to Subpart SSSSS of Part 63—Continuous Compliance with Emission Limits**

As stated in §63.9810, you must show continuous compliance with the emission limits for affected sources according to the following table:

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
1. Each affected source listed in Table 1 to this subpart	a. Each applicable emission limit listed in Table 1 to this subpart	i. Collecting and recording the monitoring and process data listed in Table 2 (operating limits) to this subpart; and
		ii. Reducing the monitoring and process data associated with the operating limits specified in Table 2 to this subpart; and
		iii. Recording the results of any control device inspections; and
		iv. Reporting, in accordance with §63.9814(e), any deviation from the applicable operating limits specified in Table 2 to this subpart.



<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
2. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank	As specified in items 3 through 7 of this table	Satisfying the applicable requirements specified in items 3 through 7 of this table.
3. Each affected process unit that is equipped with a thermal or catalytic oxidizer	a. The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen; OR the average THC percentage reduction must equal or exceed 95 percent	i. Collecting the applicable data measured by the control device temperature monitoring system, as specified in items 5, 6, 8, and 9 of Table 8 to this subpart; and
		ii. Reducing the applicable data measured by the control device temperature monitoring system, as specified in items 5, 6, 8, and 9 of Table 8 to this subpart; and
		iii. Maintaining the average control device operating temperature for the applicable averaging period specified in items 5, 6, 8, and 9 of Table 2 to this subpart at or above the minimum allowable operating temperature established during the most recent performance test.

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
4. Each affected process unit that is equipped with a control device other than a thermal or catalytic oxidizer	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen; OR the average THC performance reduction must equal or exceed 95 percent	Operating and maintaining a THC CEMS at the outlet of the control device or in the stack of the affected source, according to the requirements of Procedure 1 of 40 CFR part 60, appendix F.
5. Each affected process unit that uses process changes to meet the applicable emission limit	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen	Operating and maintaining a THC CEMS at the outlet of the control device or in the stack of the affected source, according to the requirements of Procedure 1 of 40 CFR part 60, appendix F.
6. Each affected continuous process unit	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen; OR the average THC percentage reduction must equal or exceed 95 percent	Recording the organic HAP processing rate (pounds per hour) and the operating temperature of the affected source, as specified in items 3.b. and 3.c. of Table 4 to this subpart.
7. Each affected batch process unit	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen; OR the average THC percentage reduction must equal or exceed 95 percent	Recording the organic HAP processing rate (pounds per batch); and process cycle time for each batch cycle; and hourly average operating temperature of the affected source, as specified in items 8.b. through 8.d. of Table 4 to this subpart.
8. Each new kiln that is used to process clay refractory products	As specified in items 9 through 11 of this table	Satisfying the applicable requirements specified in items 9 through 11 of this table.

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
9. Each new affected kiln that is equipped with a DLA	<p>a. The average HF emissions must not exceed 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed, OR the average uncontrolled HF emissions must be reduced by at least 90 percent; and</p> <p>b. The average HCl emissions must not exceed 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed, or the average uncontrolled HCl emissions must be reduced by at least 30 percent</p>	<p>i. Maintaining the pressure drop across the DLA at or above the minimum levels established during the most recent performance test; and</p> <p>ii. Verifying that the limestone hopper contains an adequate amount of free-flowing limestone by performing a daily visual check of the limestone in the feed hopper; and</p> <p>iii. Recording the limestone feeder setting daily to verify that the feeder setting is at or above the level established during the most recent performance test; and</p> <p>iv. Using the same grade of limestone as was used during the most recent performance test and maintaining records of the source and grade of limestone.</p>
	<p>c. The average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr); and</p> <p>d. The average Hg emissions must not exceed 6.1 µg/dscm, corrected to 18 percent oxygen</p>	<p>i. Performing VE observations of the stack at the frequency specified in §63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A-7; maintaining no VE from the stack.</p>

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
10. Each new affected kiln that is equipped with a DIFF or DLS/FF	<p>a. The average HF emissions must not exceed 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed; OR the average uncontrolled HF emissions must be reduced by at least 90 percent; and</p> <p>b. The average HCl emissions must not exceed 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed; OR the average uncontrolled HCl emissions must be reduced by at least 30 percent; and</p> <p>c. The average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr); and</p> <p>d. The average Hg emissions must not exceed 6.1 µg/dscm, corrected to 18 percent oxygen</p>	<p>i. Verifying at least once each 8-hour shift that lime is free-flowing by means of a visual check, checking the output of a load cell, carrier gas/lime flow indicator, or carrier gas pressure drop measurement system; and</p> <p>ii. Recording feeder setting daily to verify that the feeder setting is at or above the level established during the most recent performance test; and</p> <p>iii. Initiating corrective action within 1 hour of a bag leak detection system alarm AND completing corrective actions in accordance with the OM&amp;M plan, AND operating and maintaining the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period.</p>

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
11. Each new affected kiln that is equipped with a wet scrubber	a. The average HF emissions must not exceed 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed; OR the average uncontrolled HF emissions must be reduced by at least 90 percent; and b. The average HCl emissions must not exceed 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed; OR the average uncontrolled HCl emissions must be reduced by at least 30 percent; and c. The average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr); and d. The average Hg emissions must not exceed 6.1 µg/dscm, corrected to 18 percent oxygen	i. Maintaining the pressure drop across the scrubber, liquid pH, and liquid flow rate at or above the minimum levels established during the most recent performance test; and ii. If chemicals are added to the scrubber liquid, maintaining the average chemical feed rate at or above the minimum chemical feed rate established during the most recent performance test.
12. Each new affected kiln that is equipped with an activated carbon injection system	The average Hg emissions must not exceed 6.1 µg/dscm, corrected to 18 percent oxygen	Collecting the carbon flow rate data according to §63.9804(a); reducing the carbon flow rate data to 3-hour block averages according to §63.9804(a); maintaining the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
13. Each existing affected kiln that is equipped with a DLA or no add-on control	a. The average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr); and b. The average Hg emissions must not exceed 18 µg/dscm, corrected to 18 percent oxygen	i. Performing VE observations of the stack at the frequency specified in §63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A-7; maintaining no VE from the stack.
14. Each existing affected kiln that is equipped with a DIFF or DLS/FF	a. The average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr)	i. If you use a bag leak detection system, as prescribed in §63.9804(f), initiating corrective action within 1 hour of a bag leak detection system alarm AND completing corrective actions in accordance with the OM&M plan, AND operating and maintaining the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period; OR ii. Performing VE observations of the stack at the frequency specified in §63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A-7; maintaining no VE from the stack.
15. Each existing affected kiln that is equipped with a wet scrubber	a. The average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr); and b. The average Hg emissions must not exceed 18 µg/dscm, corrected to 18 percent oxygen	i. Maintaining the pressure drop across the scrubber and liquid flow rate at or above the minimum levels established during the most recent performance test.

<b>For . . .</b>	<b>For the following emission limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
16. Each existing affected kiln that is equipped with an activated carbon injection system	The average Hg emissions must not exceed 18 µg/dscm, corrected to 18 percent oxygen	Collecting the carbon flow rate data according to §63.9804(a); reducing the carbon flow rate data to 3-hour block averages according to §63.9804(a); maintaining the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.

24. Table 8 to Subpart SSSSS is revised to read as follows:

**Table 8 to Subpart SSSSS of Part 63—Continuous Compliance with Operating Limits**

As stated in §63.9810, you must show continuous compliance with the operating limits for affected sources according to the following table:

<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
1. Each affected source listed in Table 2 to this subpart	a. Each applicable operating limit listed in Table 2 to this subpart.	i. Maintaining all applicable process and control device operating parameters within the limits established during the most recent performance test; and
		ii. Conducting annually an inspection of all duct work, vents, and capture devices to verify that no leaks exist and that the capture device is operating such that all emissions are properly vented to the control device in accordance with the OM&M plan.

<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
2. Each affected continuous kiln used to manufacture refractory products that use organic HAP that is equipped with a THC control device	a. The operating limits specified in items 2.a. through 2.c. of Table 2 to this subpart	i. Operating the control device on the affected kiln during all times except during periods of approved scheduled maintenance, as specified in §63.9792(e); and
		ii. Before <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , minimizing HAP emissions from the affected kiln during all periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service; on and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , minimizing HAP emissions during the period when the kiln is operating and the control device is out of service by complying with the applicable standard in Table 3 to this subpart; and
		iii. Minimizing the duration of all periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service; on and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , the total time during which the kiln is operating and the control device is out of service for the each year on a 12-month rolling basis must not exceed 750 hours.



<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
3. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank	As specified in items 4 through 9 of this table.	Satisfying the applicable requirements specified in items 4 through 9 of this table.
4. Each affected continuous process unit	Maintain process operating parameters within the limits established during the most recent performance test	i. Recording the organic HAP processing rate (pounds per hour); and
		ii. Recording the operating temperature of the affected source at least hourly; and
		iii. Maintaining the 3-hour block average organic HAP processing rate at or below the maximum organic HAP processing rate established during the most recent performance test.
5. Continuous process units that are equipped with a thermal oxidizer	Maintain the 3-hour block average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature established during the most recent performance test	i. Measuring and recording the thermal oxidizer combustion chamber temperature at least every 15 minutes; and

<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
		ii. Calculating the hourly average thermal oxidizer combustion chamber temperature; and
		iii. Maintaining the 3-hour block average thermal oxidizer combustion chamber temperature at or above the minimum allowable operating temperature established during the most recent performance test; and
		iv. Reporting, in accordance with §63.9814(e), any 3-hour block average operating temperature measurements below the minimum allowable thermal oxidizer combustion chamber operating temperature established during the most recent performance test.
6. Continuous process units that are equipped with a catalytic oxidizer	a. Maintain the 3-hour block average temperature at the inlet of the catalyst bed at or above the minimum allowable catalyst bed inlet temperature established during the most recent performance test	i. Measuring and recording the temperature at the inlet of the catalyst bed at least every 15 minutes; and
		ii. Calculating the hourly average temperature at the inlet of the catalyst bed; and
		iii. Maintaining the 3-hour block average temperature at the inlet of the catalyst bed at or above the minimum allowable catalyst bed inlet temperature established during the most recent performance test; and

<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
		iv. Reporting, in accordance with §63.9814(e), any 3-hour block average catalyst bed inlet temperature measurements below the minimum allowable catalyst bed inlet temperature established during the most recent performance; and
		v. Checking the activity level of the catalyst at least every 12 months and taking any necessary corrective action, such as replacing the catalyst, to ensure that the catalyst is performing as designed.
7. Each affected batch process unit	Maintain process operating parameters within the limits established during the most recent performance test	i. Recording the organic HAP processing rate (pounds per batch); and
		ii. Recording the hourly average operating temperature of the affected source; and
		iii. Recording the process cycle time for each batch cycle; and
		iv. Maintaining the organic HAP processing rate at or below the maximum organic HAP processing rate established during the most recent performance test.
8. Batch process units that are equipped with a thermal oxidizer	Maintain the hourly average temperature in the thermal oxidizer combustion chamber at or above the hourly average temperature established for the corresponding 1-hour period of the cycle during the most recent performance test	i. Measuring and recording the thermal oxidizer combustion chamber temperature at least every 15 minutes; and
		ii. Calculating the hourly average thermal oxidizer combustion chamber temperature; and

<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
		iii. From the start of each batch cycle until 3 hours have passed since the process unit reached maximum temperature, maintaining the hourly average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature established for the corresponding period during the most recent performance test, as determined according to item 11 of Table 4 to this subpart; and
		iv. For each subsequent hour of the batch cycle, maintaining the hourly average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature established for the corresponding hour during the most recent performance test, as specified in item 13 of Table 4 to this subpart; and
		v. Reporting, in accordance with §63.9814(e), any temperature measurements below the minimum allowable thermal oxidizer combustion chamber temperature measured during the most recent performance test.
9. Batch process units that are equipped with a catalytic oxidizer	Maintain the hourly average temperature at the inlet of the catalyst bed at or above the corresponding hourly average temperature established for the corresponding 1-hour period of the cycle during the most recent performance test	i. Measuring and recording temperatures at the inlet of the catalyst bed at least every 15 minutes; and

<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
		ii. Calculating the hourly average temperature at the inlet of the catalyst bed; and
		iii. From the start of each batch cycle until 3 hours have passed since the process unit reached maximum temperature, maintaining the hourly average operating temperature at the inlet of the catalyst bed at or above the minimum allowable bed inlet temperature established for the corresponding period during the most recent performance test, as determined according to item 12 of Table 4 to this subpart; and
		iv. For each subsequent hour of the batch cycle, maintaining the hourly average operating temperature at the inlet of the catalyst bed at or above the minimum allowable bed inlet temperature established for the corresponding hour during the most recent performance test, as specified in item 13 of Table 4 to this subpart; and
		v. Reporting, in accordance with §63.9814(e), any catalyst bed inlet temperature measurements below the minimum allowable bed inlet temperature measured during the most recent performance test; and
		vi. Checking the activity level of the catalyst at least every 12 months and taking any necessary corrective action, such as replacing the catalyst, to ensure that the catalyst is performing as designed.

<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
10. Each new kiln that is used to process clay refractory products	As specified in items 11 through 13 of this table	Satisfying the applicable requirements specified in items 11 through 13 of this table.
11. Each new kiln that is equipped a DLA	a. Maintain the average pressure drop across the DLA for each 3-hour block period at or above the minimum pressure drop established during the most recent performance test	i. Collecting the DLA pressure drop data, as specified in item 18.a. of Table 4 to this subpart; and
		ii. Reducing the DLA pressure drop data to 1-hour and 3-hour block averages; and
		iii. Maintaining the 3-hour block average pressure drop across the DLA at or above the minimum pressure drop established during the most recent performance test.
	b. Maintain free-flowing limestone in the feed hopper, silo, and DLA	Verifying that the limestone hopper has an adequate amount of free-flowing limestone by performing a daily visual check of the limestone hopper.
	c. Maintain the limestone feeder setting at or above the level established during the most recent performance test	Recording the limestone feeder setting at least daily to verify that the feeder setting is being maintained at or above the level established during the most recent performance test.
	d. Use the same grade of limestone from the same source as was used during the most recent performance test	Using the same grade of limestone as was used during the most recent performance test and maintaining records of the source and grade of limestone.
	e. Maintain no VE from the stack	i. Performing VE observations of the stack at the frequency specified in §63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A-7; and
		ii. Maintaining no VE from the stack.

<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
12. Each new kiln that is equipped with a DIFF or DLS/FF	a. Initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with the OM&M plan; AND operate and maintain the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period	i. Initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with the OM&M plan; and
		ii. Operating and maintaining the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm shall be counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by you to initiate corrective action.
	b. Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; AND maintain feeder setting at or above the level established during the most recent performance test for continuous injection systems	i. Verifying at least once each 8-hour shift that lime is free-flowing via a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system, or other system; recording all monitor or sensor output, and if lime is found not to be free flowing, promptly initiating and completing corrective actions; and

<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
		ii. Recording the feeder setting once each day of operation to verify that the feeder setting is being maintained at or above the level established during the most recent performance test.
13. Each new kiln that is used to process clay refractory products and is equipped with a wet scrubber	a. Maintain the average pressure drop across the scrubber for each 3-hour block period at or above the minimum pressure drop established during the most recent performance test	i. Collecting the scrubber pressure drop data, as specified in item 20.a. of Table 4 to this subpart; and
		ii. Reducing the scrubber pressure drop data to 1-hour and 3-hour block averages; and
		iii. Maintaining the 3-hour block average scrubber pressure drop at or above the minimum pressure drop established during the most recent performance test.
	b. Maintain the average scrubber liquid pH for each 3-hour block period at or above the minimum scrubber liquid pH established during the most recent performance test	i. Collecting the scrubber liquid pH data, as specified in item 20.b. of Table 4 to this subpart; and
		ii. Reducing the scrubber liquid pH data to 1-hour and 3-hour block averages; and
		iii. Maintaining the 3-hour block average scrubber liquid pH at or above the minimum scrubber liquid pH established during the most recent performance test.
	c. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the minimum scrubber liquid flow rate established during the most recent performance test	i. Collecting the scrubber liquid flow rate data, as specified in item 20.c. of Table 4 to this subpart; and



For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
		ii. Reducing the scrubber liquid flow rate data to 1-hour and 3-hour block averages; and
		iii. Maintaining the 3-hour block average scrubber liquid flow rate at or above the minimum scrubber liquid flow rate established during the most recent performance test.
	d. If chemicals are added to the scrubber liquid, maintain the average scrubber chemical feed rate for each 3-hour block period at or above the minimum scrubber chemical feed rate established during the most recent performance test	i. Collecting the scrubber chemical feed rate data, as specified in item 20.d. of Table 4 to this subpart; and
		ii. Reducing the scrubber chemical feed rate data to 1-hour and 3-hour block averages; and
		iii. Maintaining the 3-hour block average scrubber chemical feed rate at or above the minimum scrubber chemical feed rate established during the most recent performance test.
14. Each new and existing affected kiln that is equipped with an activated carbon injection system	a. Maintain the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.	i. Collecting the carbon flow rate data, as specified in item 23 of Table 4 to this subpart; and
		ii. Reducing the carbon flow rate data to 3-hour block averages; and

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
		iii. Maintaining the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.
15. Each existing affected kiln that is equipped with a DLA or no add-on control	a. Maintain no VE from the stack	i. Performing VE observations of the stack at the frequency specified in §63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A-7; and
		ii. Maintaining no VE from the stack.
16. Each existing affected kiln that is equipped with a FF	a. Maintain no VE from the stack; OR	i. Performing VE observations of the stack at the frequency specified in §63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A-7; and
		ii. Maintaining no VE from the stack.
	b. Initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with the OM&M plan; AND operate and maintain the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period	i. Initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with the OM&M plan; and

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
		ii. Operating and maintaining the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm shall be counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by you to initiate corrective action.
17. Each existing affected kiln that is equipped with a wet scrubber	a. Maintain the average pressure drop across the scrubber for each 3-hour block period at or above the minimum pressure drop established during the most recent performance test	i. Collecting the scrubber pressure drop data, as specified in item 25.a of Table 4 to this subpart; and
		ii. Reducing the scrubber pressure drop data to 1-hour and 3-hour block averages; and
		iii. Maintaining the 3-hour block average scrubber pressure drop at or above the minimum pressure drop established during the most recent performance test.
	b. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the minimum scrubber liquid flow rate established during the most recent performance test	i. Collecting the scrubber liquid flow rate data, as specified in item 25.b. of Table 4 to this subpart; and

<b>For . . .</b>	<b>For the following operating limit . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
		ii. Reducing the scrubber liquid flow rate data to 1-hour and 3-hour block averages; and
		iii. Maintaining the 3-hour block average scrubber liquid flow rate at or above the minimum scrubber liquid flow rate established during the most recent performance test.

25. Table 9 to Subpart SSSSS is revised to read as follows:

**Table 9 to Subpart SSSSS of Part 63—Continuous Compliance With Work Practice**

**Standards**

As stated in §63.9810, you must show continuous compliance with the work practice standards for affected sources according to the following table:

<b>For . . .</b>	<b>For the following work practice standard . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
1. Each affected source listed in Table 3 to this subpart	Each applicable work practice requirement listed in Table 3 to this subpart	i. Performing each applicable work practice standard listed in Table 3 to this subpart; and
		ii. Maintaining records that document the method and frequency for complying with each applicable work practice standard listed in Table 3 to this subpart, as required by §§63.10(b) and 63.9816(c)(2).
2. Each basket or container that is used for holding fired refractory shapes in an existing shape preheater and autoclave during the pitch impregnation process	Control POM emissions from any affected shape preheater	i. Controlling emissions from the volatilization of residual pitch by implementing one of the work practice standards listed in item 1 of Table 3 to this subpart; and

For . . .	For the following work practice standard . . .	You must demonstrate continuous compliance by . . .
		ii. Recording the date and cleaning method each time you clean an affected basket or container.
3. Each new or existing pitch working tank	Control POM emissions	Capturing and venting emissions from the affected pitch working tank to the control device that is used to control emissions from an affected defumer or coking oven, or to a thermal or catalytic oxidizer that is comparable to the control device used on an affected defumer or coking oven.
4. Each new or existing chromium refractory products kiln	Minimize fuel-based HAP emissions	i. Before <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , using natural gas, or equivalent, as the kiln fuel at all times except during periods of natural gas curtailment or supply interruption; on and after <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , using natural gas, or equivalent, as the kiln fuel at all times; and
		ii. Before <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , if you intend to use an alternative fuel, submitting a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.9824; and
		iii. Before <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , submitting a report of alternative fuel use within 10 working days after terminating the use of the alternative fuel, as specified in §63.9814(g).

<b>For . . .</b>	<b>For the following work practice standard . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
5. Each existing clay refractory products kiln	Minimize fuel-based HAP emissions	i. Before <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , using natural gas, or equivalent, as the kiln fuel at all times except during periods of natural gas curtailment or supply interruption; on and after <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , using natural gas, or equivalent, as the kiln fuel at all times; and
		ii. Before <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , if you intend to use an alternative fuel, submitting a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.9824; and
		iii. Before <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , submitting a report of alternative fuel use within 10 working days after terminating the use of the alternative fuel, as specified in §63.9814(g).
6. Each affected continuous kiln used to manufacture refractory products that use organic HAP that is equipped with an emission control device for THC	Minimize organic HAP emissions	i. Operating the control device at all times unless you receive Administrator approval to take the control device out of service for scheduled maintenance, as specified in §63.9792(e); and
		ii. Minimizing HAP emissions during the period when the kiln is operating and the control device is out of service as specified in item 5 of Table 3 to this subpart; and

<b>For . . .</b>	<b>For the following work practice standard . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
		iii. On and after <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , recording the actual hourly organic HAP processing rate for the kiln while the control device was out of service and the amount of product manufactured in the kiln while the control device was out of service; and
		iv. Recording the duration of each period when the kiln is operating and the control device is out of service and, on and after <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , the total amount of time per year on a 12-month rolling basis that the kiln has operated and the control device has been out of service.
7. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP, on and after <b>[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b>	Minimize fuel-based HAP emissions	Using natural gas, or equivalent, as the kiln fuel at all times.

26. Table 10 to Subpart SSSSS is revised to read as follows:

**Table 10 to Subpart SSSSS of Part 63—Requirements for Reports**

As stated in §63.9814, you must comply with the requirements for reports in the following table:

<b>You must submit a(n) . . .</b>	<b>The report must contain . . .</b>	<b>You must submit the report . . .</b>
1. Compliance report	The information in §63.9814(c) through (f)	Semiannually according to the requirements in §63.9814(a) through (f).

<b>You must submit a(n) . . .</b>	<b>The report must contain . . .</b>	<b>You must submit the report . . .</b>
2. Before <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , immediate SSM report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP On and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , immediate SSM report is not required	a. Actions taken for the event	By fax or telephone within 2 working days after starting actions inconsistent with the plan.
	b. The information in §63.10(d)(5)(ii)	By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.
3. Before <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> , report of alternative fuel use	The information in §63.9814(g) and items 4 and 5 of Table 9 to this subpart	If you are subject to the work practice standard specified in item 3 or 4 of Table 3 to this subpart, and you use an alternative fuel in the affected kiln, by letter within 10 working days after terminating the use of the alternative fuel.
4. Performance test report	The information in §63.7(g)	According to the requirements of §63.9814(h).
5. CMS performance evaluation, as required for CEMS	The information in §63.7(g)	According to the requirements of §63.9814(i).

27. Table 11 to Subpart SSSSS is revised to read as follows:

**Table 11 to Subpart SSSSS of Part 63—Applicability of General Provisions to Subpart SSSSS**

As stated in §63.9820, you must comply with the applicable General Provisions requirements according to the following table:



<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSSS</b>
§63.1	Applicability		Yes.
§63.2	Definitions		Yes.
§63.3	Units and Abbreviations		Yes.
§63.4	Prohibited Activities	Compliance date; circumvention, severability	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes.
§63.6(a)	Applicability	General Provisions (GP) apply unless compliance extension; GP apply to area sources that become major	Yes.
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f)	Yes.
§63.6(b)(5)	Notification		Yes.
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were area sources	Yes.

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSSS</b>
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension	Yes.
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years)	Yes.
§63.6(d)	[Reserved]		
§63.6(e)(1)-(2)	Operation & Maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met; see §63.9792(b) for general duty requirement.	Yes before <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> No on and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].</b>

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSS</b>
§63.6(e)(3)	SSMP requirements		Yes before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] No on and after [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard.	Yes.
§63.6(h)(1)-(9)	Opacity/Visible Emission (VE) Standards		Not applicable.
§63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt source category	Yes.

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSSS</b>
§63.7(a)(1)-(2)	Performance Test Dates	Dates for conducting initial performance testing and other compliance demonstrations; must conduct 180 days after first subject to rule	Yes.
§63.7(a)(3)	Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Rescheduling	Must notify Administrator 5 days before scheduled date and provide rescheduled date	Yes.
§63.7(c)	Quality Assurance/Test Plan	Requirements; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities		Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	See §63.9800.	No, §63.9800 specifies requirements.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to subpart and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes; Yes, except where specified in §63.9800 for batch process sources; Yes.

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSS</b>
§63.7(f)	Alternative Test Method		Yes.
§63.7(g)	Performance Test Data Analysis		Yes, except this subpart specifies how and when the performance test and performance evaluation results are reported.
§63.7(h)	Waiver of Test		Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements		Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring with Flares		Not applicable.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing and reporting on monitoring systems	Yes.

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSS</b>
§63.8(c)(1)	Continuous Monitoring System Operation and Maintenance	Maintenance consistent with good air pollution control practices	Yes before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] No on and after [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
§63.8(c)(2)-(3)	Monitoring System Installation	Must install to get representative emission and parameter measurements	Yes.
§63.8(c)(4)	CMS Requirements		No, §63.9808 specifies requirements.
§63.8(c)(5)	COMS Minimum Procedures		Not applicable.
§63.8(c)(6)	CMS Requirements		Applies only to sources required to install and operate a THC CEMS.
§63.8(c)(7)(i)(A)	CMS Requirements		Applies only to sources required to install and operate a THC CEMS.
§63.8(c)(7)(i)(B)	CMS Requirements		Applies only to sources required to install and operate a THC CEMS.
§63.8(c)(7)(i)(C)	CMS Requirements		Not applicable.
§63.8(c)(7)(ii)	CMS Requirements	Corrective action required when CMS is out of control	Yes.

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSSS</b>
§63.8(c)(8)	CMS Requirements		Yes.
§63.8(d)(1) and (2)	CMS Quality Control		Yes.
§63.8(d)(3)	Written procedures for CMS		No, §63.9794(a)(8) specifies requirements.
§63.8(e)	CMS Performance Evaluation		Applies only to sources required to install and operate a THC CEMS, except this subpart specifies how and when the performance evaluation results are reported.
§63.8(f)(1)-(5)	Alternative Monitoring Method		Yes.
§63.8(f)(6)	Alternative to Relative Accuracy Test		Yes.
§63.8(g)	Data Reduction		Applies only to sources required to install and operate a THC CEMS.
§63.9(a)	Notification Requirements		Yes.
§63.9(b)(1)-(5)	Initial Notifications		Yes.
§63.9(c)	Request for Compliance Extension		Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Source		Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test		Not applicable.

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSSS</b>
§63.9(g)	Additional Notifications When Using CMS		Applies only to sources required to install and operate a THC CEMS.
§63.9(h)	Notification of Compliance Status		Yes.
§63.9(i)	Adjustment of Submittal Deadlines		Yes.
§63.9(j)	Change in Previous Information		Yes.
§63.9(k)	Notifications	Electronic reporting procedures	Yes, only as specified in §63.9(j)
§63.10(a)	Recordkeeping/Reporting		Yes.
§63.10(b)(1)	General Recordkeeping Requirements		Yes.
§63.10(b)(2)(i)-(ii)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns and Failures to Meet Standards	See §63.9816	Yes before <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> No on and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].</b>
§63.10(b)(2)(iii)	Recordkeeping Relevant to Maintenance of Air Pollution Control and Monitoring Equipment		Yes.



Citation	Subject	Brief description	Applies to subpart SSSSS
§63.10(b)(2)(iv)-(v)	Actions Taken to Minimize Emissions during SSM		<p>Yes before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].</p> <p>No on and after [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].</p>
§63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	See §63.9816(c)(5).	<p>Yes before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].</p> <p>No on and after [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].</p>

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSSS</b>
§63.10(b)(2)(vii)-(xi)	Records	Measurements to demonstrate compliance with emission limitations; performance test, performance evaluation, and visible emission observation results; measurements to determine conditions of performance tests and performance evaluations	Yes.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Not applicable.
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§63.10(b)(3)	Records	Applicability Determinations	Yes.
§63.10(c)(1), (c)(5)-(6)	Additional Records for CMS		Yes.
§63.10(c)(2)-(4)	Records	Additional Records for CMS	Not applicable
§63.10(c)(7)-(8)	Records of excess emissions and parameter monitoring exceedances for CMS	§63.9816 specifies requirements.	No.
§63.10(c)(9)	Records	Additional Records for CMS	Not applicable
§63.10(c)(10)-(14)	Additional Records for CMS		Yes.

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSS</b>
§63.10(c)(15)	Records Regarding the SSMP.		Yes before [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. No on and after [INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
§63.10(d)(1)	General Reporting Requirements	Requirements for reporting	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	No. This subpart specifies how and when the performance test results are reported.
§63.10(d)(3)	Reporting Opacity or VE Observations		Not applicable.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart SSSSS</b>
§63.10(d)(5)	SSM Reports	Contents and submission See §63.9814 (d) and (e) for malfunction reporting requirements.	Yes before <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]</b> No on and after <b>[INSERT DATE 181 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].</b>
§63.10(e)(1)-(2)	Additional CMS Reports		Applies only to sources required to install and operate a THC CEMS, except this subpart specifies how and when the performance evaluation results are reported.
§63.10(e)(3)	Reports		No, §63.9814 specifies requirements.
§63.10(e)(4)	Reporting COMS data		Not applicable.
§63.10(f)	Waiver for Recordkeeping/Reporting		Yes.
§63.11	Flares		Not applicable.
§63.12	Delegation		Yes.
§63.13	Addresses		Yes.
§63.14	Incorporation by Reference		Yes.

Citation	Subject	Brief description	Applies to subpart SSSSS
§63.15	Availability of Information and Confidentiality		Yes.
§63.16	Performance Track Provisions		Yes.

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 5:42:30 PM  
**To:** Nik Blosser **Ex. 6 Personal Privacy (PP)**  
**Subject:** quick call?

Hi Nik – if you have a few minutes this afternoon give me a ring **Ex. 6 Personal Privacy (PP)**

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 6:04:02 PM  
**To:** Hamilton, Lindsay [Hamilton.Lindsay@epa.gov]  
**Subject:** RE: Nick to ND w/Radhika

Ok thanks.

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**From:** Hamilton, Lindsay <Hamilton.Lindsay@epa.gov>  
**Sent:** Thursday, October 28, 2021 2:02 PM  
**To:** Utech, Dan <Utech.Dan@epa.gov>  
**Subject:** Nick to ND w/Radhika

Hey Dan,

Radhika asked if Nick could join her on her visit to ND on Nov. 22 as there are multiple open press events.

I think this makes sense and Nick has experience working with the Cramer team and with the ND press, so he is planning to go.

Let me know if you have any questions or concerns. First time we are sending the team out of town to support an AA, so I thought I should flag it. We are asking that this come from OW's budget.

Thanks,  
Lindsay

Lindsay Hamilton  
Associate Administrator, Public Affairs  
Environmental Protection Agency  
[Hamilton.Lindsay@epa.gov](mailto:Hamilton.Lindsay@epa.gov)  
202-510-3515 (mobile)  
[Newsroom](#) | she/her

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 6:51:01 PM  
**To:** Cassidy, Alison [Cassady.Alison@epa.gov]; Hamilton, Lindsay [Hamilton.Lindsay@epa.gov]  
**Subject:** fyi

<https://www.cdc.gov/media/releases/2021/p1028-blood-lead.html>



Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 8:00:43 PM  
**To:** Cassidy, Alison [Cassady.Alison@epa.gov]  
**Subject:** FW: update and urgent appeal to EPA RE: Rqst Mtg with EPA Administrator Regan

fyi

**From:** Claire Barnett <cbarnett@healthyschools.org>  
**Sent:** Thursday, October 28, 2021 3:24 PM  
**To:** Regan, Michael <Regan.Michael@epa.gov>; McCabe, Janet <McCabe.Janet@epa.gov>; Edwards, Jonathan <Edwards.Jonathan@epa.gov>; Rowson, David <Rowson.David@epa.gov>; Smith, Alisa <Smith.Alisa@epa.gov>; Nunez, Alejandra <Nunez.Alejandra@epa.gov>; Utech, Dan <Utech.Dan@epa.gov>; Briskin, Jeanne <Briskin.Jeanne@epa.gov>; Berger, Martha <Berger.Martha@epa.gov>  
**Cc:** **Ex. 6 Personal Privacy (PP)** biden-hspolicy@healthyschools.org; Elisabeth Krautscheid <ekrautscheid@chps.net>; Piper Largent <plargent@nasn.org>; Debra Coyle McFadden <dcoyle@njwec.org>; hsortge@njwec.org; Jenna Riemenschneider <JennaR@aafa.org>; Olivia Gomez <OliviaG@firstfocus.org>; Alex Naidoo <AlexNaidoo@healthyschools.org>; Jeff Jones **Ex. 6 Personal Privacy (PP)**; mansomel.nelson <mansomel.nelson@nau.edu>; **Ex. 6 Personal Privacy (PP)**  
**Subject:** Re: update and urgent appeal to EPA RE: Rqst Mtg with EPA Administrator Regan

Text just released

More than orig \$10m and less than House adopted \$50m/10yrs

Per AAFA

full text just came out about 40 minutes ago and there is some money for EPA to address air pollution in school. Still not enough obviously...

I've only had a chance to scan.

<https://rules.house.gov/sites/democrats.rules.house.gov/files/BILLS-117HR5376RH-RCP117-17.pdf> page 320

SEC. 30107. FUNDING TO ADDRESS AIR POLLUTION AT  
21 SCHOOLS.

22 (a) IN GENERAL.—In addition to amounts otherwise  
23 available, there is appropriated to the Administrator of the  
24 Environmental Protection Agency for fiscal year 2022, out  
25 of any money in the Treasury not otherwise appropriated,  
1 \$37,500,000, to remain available until September 30,  
2 2031, for grants and other activities to monitor and reduce air pollution and greenhouse gas emissions at schools  
4 in low-income and disadvantaged communities under subsections (a) through (c) of section 103 of the Clean Air  
6 Act (42 U.S.C. 7403(a)–(c)) and section 105 of that Act  
7 (42 U.S.C. 7405).

8 (b) TECHNICAL ASSISTANCE.—In addition to  
9 amounts otherwise available, there is appropriated to the  
10 Administrator of the Environmental Protection Agency for  
11 fiscal year 2022, out of any money in the Treasury not  
12 otherwise appropriated, \$12,500,000, to remain available  
13 until September 30, 2031, for providing technical assistance to schools in low-income and disadvantaged  
15 communities under subsections (a) through (c) of section 103 of  
16 the Clean Air Act (42 U.S.C. 7403(a)–(c)) and section

17 105 of that Act (42 U.S.C. 7405)—

18 (1) to address environmental issues;

19 (2) to develop school environmental quality

20 plans that include standards for school building, de21 sign, construction, and renovation; and

22 (3) to identify and mitigate ongoing air pollu23 tion hazards.

Claire Barnett

Healthy Schools Network

(M) 202-543-7555

On Oct 28, 2021, at 2:49 PM, Claire Barnett <[cbarnett@healthyschools.org](mailto:cbarnett@healthyschools.org)> wrote:

The brand-new Build Back Better Act does NOT include building back better schools (Rebuild Am Schools Act). We are very disappointed; however, that puts MORE, not less, pressure on US EPA to step up to advance its Healthy Schools programs and children's health with an annual investment from congress of \$1.15/child/year, or \$75M add (\$65M for OAR/IED and \$10M for OCHP.

We have communicated with all Dems on the Senate and the House Environment committees and the leadership, adding that EPA welcomes new support for these priority programs.

We emphasized several times this month the urgent need for funding EPA, as follows:

- Whether school rebuilding is funded or not, it is still critical to have EPA's funding amped up to help communities and states to help local schools, and for EPA to provide updated guidance and information and Tech Assist to local schools.
- ASHRAE and Center for Green Schools found (April 2021) that most schools in the nation were UNABLE to implement CDC's reopen guidance ("not designed to do that"), and most still have urgent concerns about Indoor Air and A/C. They also have concerns about Climate readiness (ED WEEK Survey, July 2021).
- *If there are federal funds to rebuild, local schools MUST have proven guidance on effective uses (in fact the original RASA bill's allowable uses lined up with EPA's published guidance topics).*
- ***If there are no federal funds to rebuild, then it is even more important to educate states, tribes, parents, and communities about how to preserve and protect school infrastructure, and how to quickly identify and fix problems as efficiently and effectively as possible given scarce funding.***

EPA national and regional grants have educated and once inspired states and communities to adopt new policies on IAQ and create new CEH programs.

EPA can deliver: tech and education and training grants (natl and regional), new standards on school/childcare IAQ/ventilation, new guidance on climate readiness and resiliency, enhanced special assistance to EJ communities on outdoor and indoor air and pediatric consultations, annual grantee symposia, research, and more.

Claire Barnett

Cc's

<<...>> <<...>>

Claire L. Barnett, MBA, Executive Director

Healthy Schools Network

*...for children ... health ... environment ... education ... and communities ... since 1995 ...*

(w) 518-462-0632

(m) 202-543-7555

[www.HealthySchools.org](http://www.HealthySchools.org) – who we are, what you can do, help for parents and others

[www.CleaningforHealthySchools.org](http://www.CleaningforHealthySchools.org) - green and healthy products

[www.NationalHealthySchoolsDay.org](http://www.NationalHealthySchoolsDay.org) – since 2002, join us for the 19<sup>th</sup> annual on April 6, 2021

---

**From:** Claire Barnett <[cbarnett@healthyschools.org](mailto:cbarnett@healthyschools.org)>

**Sent:** Wednesday, October 6, 2021 10:04 AM

**To:** 'utech.daniel@epa.gov' <[utech.daniel@epa.gov](mailto:utech.daniel@epa.gov)>; 'regan.michael@epa.gov' <[regan.michael@epa.gov](mailto:regan.michael@epa.gov)>; 'McCabe, Janet' <[McCabe.Janet@epa.gov](mailto:McCabe.Janet@epa.gov)>; 'Edwards, Jonathan' <[Edwards.Jonathan@epa.gov](mailto:Edwards.Jonathan@epa.gov)>; 'Rowson, David' <[Rowson.David@epa.gov](mailto:Rowson.David@epa.gov)>; 'Smith, Alisa' <[Smith.Alisa@epa.gov](mailto:Smith.Alisa@epa.gov)>; 'Nunez, Alejandra' <[Nunez.Alejandra@epa.gov](mailto:Nunez.Alejandra@epa.gov)>

**Cc:** 'Claire Barnett' <[cbarnett@healthyschools.org](mailto:cbarnett@healthyschools.org)>; **Ex. 6 Personal Privacy (PP)**

**Ex. 6 Personal Privacy (PP)** 'biden-hspolicy@healthyschools.org' <[biden-hspolicy@healthyschools.org](mailto:biden-hspolicy@healthyschools.org)>

**Subject:** Rqst Mtg with EPA Administrator Regan

October 6, 2021 – *via email to M Regan, cc to D Uteck, J McCabe; and OAR A Nunez, J Edwards, D Rowson, A Smith*

Michael Regan, Administrator

US Environmental Protection Agency

1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

Re: Re-Request Meeting on Build Back Better Schools: COVID and Climate Resilient

Dear Administrator Regan:

Congratulations again on your confirmation as US EPA Administrator. On behalf of the national Coalition for Healthier Schools, encompassing hundreds of individual and scores of organizations, we are re-requesting a meeting with you at your earliest convenience to discuss EPA's role in ensuring environmentally healthier indoors environments in schools/childcares. We look forward to learning more about your agenda for children and for schools and learning how we can coordinate key messages. — see full letter attached —

<< File: CHS ltr to EPA Admin M Regan mtg Rqst Oct 6 2021.pdf >>

Thank you for your consideration,

Claire Barnett

Claire L. Barnett, MBA, Executive Director

Healthy Schools Network

*...for children ... health ... environment ... education ... and communities ... since 1995 ...*

(w) 518-462-0632

(m) 202-543-7555

[www.HealthySchools.org](http://www.HealthySchools.org) — who we are, what you can do, help for parents and others

[www.CleaningforHealthySchools.org](http://www.CleaningforHealthySchools.org) - green and healthy products

[www.NationalHealthySchoolsDay.org](http://www.NationalHealthySchoolsDay.org) — since 2002, join us for the 19<sup>th</sup> annual on April 6, 2021

<Build Back Better Framework.pdf>

<CHS- Fund EPA presser Oct 14 2021- hi-lt.pdf>

Message

**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 7:39:54 PM  
**To:** scheduling [scheduling@epa.gov]; Lance, Kathleen [Lance.Kathleen@epa.gov]; Blythers, Dorian [Blythers.Dorian@epa.gov]  
**Subject:** FW: CERAWeek 2022 Speaking Invitation for The Honorable Michael S. Regan  
**Attachments:** Hon. Michael S. Regan\_CERAWeek 2022 Invitation\_08-30-2021.pdf; 2021 CERAWeek Partial Speaker List.pdf

Can't remember if we talked about this one but I think it's a great opportunity and one he should do. It's the biggest energy conference of the year. Kerry, Granholm, Gina all spoke at the 2021 conference.

---

**From:** Dianne Russell <Dianne.Russell@ihsmarkit.com>  
**Sent:** Thursday, October 28, 2021 2:45 PM  
**To:** Utech, Dan <Utech.Dan@epa.gov>  
**Cc:** Richard Slucher <Richard.Slucher@ihsmarkit.com>  
**Subject:** CERAWeek 2022 Speaking Invitation for The Honorable Michael S. Regan

Dear Mr. Utech,

I wanted to follow up on Administrator Regan's invitation from Dr. Daniel Yergin to speak at CERAWeek 2022 – IHS Markit's annual Executive Conference, which will be held in person on March 7-11, 2022 in Houston. We look forward to his participation and hope this works with his schedule. If you have any questions please feel free to reach out, I look forward to hearing from you soon.

Kind regards,  
Dianne



Dianne Russell  
Sr. Events Principal | IHS Markit CERAWeek  
One Financial Center, Suite 1900, 9<sup>th</sup> Floor | Boston, MA 02111, USA  
P: +1 617 866 5171 Cell: +1 603 479 2794  
[Dianne.Russell@IHSMarkit.com](mailto:Dianne.Russell@IHSMarkit.com)



---

**From:** Dianne Russell  
**Sent:** Tuesday, August 31, 2021 11:11 AM  
**To:** [Utech.Dan@epa.gov](mailto:Utech.Dan@epa.gov)  
**Cc:** Richard Slucher <[Richard.Slucher@ihsmarkit.com](mailto:Richard.Slucher@ihsmarkit.com)>  
**Subject:** CERAWeek 2022 Speaking Invitation for The Honorable Michael S. Regan

Dear Mr. Utech,

On behalf of Daniel Yergin, we would like to extend to Administrator Regan a most cordial invitation to speak at CERAWeek 2022 – IHS Markit's annual Executive Conference, which will be held in person on March 7-11, 2022 in Houston. Administrator Regan's remarks would be very timely and of great significance for this influential gathering of senior leaders and we would be honored to have him speak at CERAWeek.

Attached is the invitation along with a list of featured speakers from recent years. We hope this works for the Administrator's schedule, and look forward to hearing from you.

Please feel free to reach out to us with any questions.

Kind regards,  
Dianne



Dianne Russell  
Sr. Events Principal | IHS Markit CERAWeek  
One Financial Center, Suite 1900, 9<sup>th</sup> Floor | Boston, MA 02111, USA  
P: +1 617 866 5171 Cell: +1 603 479 2794  
[Dianne.Russell@IHSMarkit.com](mailto:Dianne.Russell@IHSMarkit.com)



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August 30, 2021

The Honorable Michael S. Regan  
Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
WJC North Building  
Washington, D.C. 20460

Dear Administrator Regan,

I would like to extend to you a most cordial invitation to speak at CERAWeek 2022, our 40<sup>th</sup> annual gathering, to be held in person on March 7-11, 2022 in Houston. Your remarks and perspective will be highly anticipated and of great interest to this influential gathering of senior leaders.

As you may know, CERAWeek is a global platform for shared learning, exchange, and connection. It is widely considered to be the most prestigious annual meeting of the world energy industry and has been rated among the top five overall “corporate leader” conferences in the world. Previous conferences included participants from 100 countries and over 500 media representatives. Attached please find a list of featured speakers from recent years.

This year’s speakers included John Kerry, Jennifer Granholm, Gina McCarthy, Bill Gates, Prime Minister Modi of India, President Duque of Colombia, Mark Carney, and Senators Joe Manchin, Lisa Murkowski, and John Cornyn, as well as many state officials, officials from other countries, CEOs, and members of civil society.

CERAWeek 2022 will focus on the challenges ahead for the energy transition and what this means for environmental policy and all aspects of the industry and beyond. The policy and regulatory direction that you provide at the Environmental Protection Agency will have a profound impact on energy and infrastructure investment and the way in which the energy transition intersects with the nation’s energy security.

CERAWeek will provide you with a unique platform to share your insights, and with a podium to communicate important messages about EPA policies and initiatives that have great impact. Our CERAWeek community includes 20,000 leaders and professional experts in energy, environment, regulation, technology, finance, sustainability, and public policy. In addition, the conference will offer opportunities for high-level discussions and private meetings.



We would be honored to have you as a speaker at CERAWeek 2022. To confirm, your office may reply directly to me ([daniel.yergin@ihsmarkit.com](mailto:daniel.yergin@ihsmarkit.com)), or to my colleague Dianne Russell ([dianne.russell@ihsmarkit.com](mailto:dianne.russell@ihsmarkit.com)). I do hope that you can join us.

Thank you much for your consideration.

With kind regards and best wishes,

Daniel Yergin



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**President George W. Bush**, United States  
**President Bill Clinton**, United States  
**Her Royal Highness Crown Princess Mary Elizabeth of Denmark**

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**President Iván Duque Márquez**, Colombia  
**Prime Minister Narendra Modi**, India

**President Enrique Peña Nieto**, Mexico  
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**HE Saad Sherida Al-Kaabi**, Minister of State for Energy Affairs, President & CEO, Qatar Petroleum  
**HE Bakheet Al-Rashidi**, Minister of Oil, Electricity & Water, Kuwait; Chairman, Kuwait Petroleum  
**HE Mohammed Hamed Saif Al-Rumhy**, Minister of Oil & Gas, Oman  
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**Hon. Niels Annen**, Minister of State, Federal Foreign Office, Federal Republic of Germany  
**HE Mohammad Sanusi Barkindo**, Secretary General, OPEC  
**Hon. Kanat Bozumbayev**, Minister of Energy, Republic of Kazakhstan  
**Hon. Tina Bru**, Minister of Petroleum & Energy, Norway  
**Luis Videgaray Caso**, Secretary of Finance & Public Credit, Mexico

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**Admiral Bento Costa Lima Leite de Albuquerque**, Minister of Mines & Energy, Brazil  
**HE José Maria Botelho de Vasconcelos**, Minister of Petroleum, Angola  
**HE Eng. Tarek El Molla**, Minister of Petroleum & Mineral Resources, Egypt  
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**Shin Hosaka**, Commissioner for Agency for Natural Resources & Energy, Ministry of Economy, Trade & Industry (METI), Japan  
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**HE Salvador Namburete**, Minister of Energy, Mozambique  
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**Hon. Henry Kissinger**, Former US Secretary of State  
**Hon. Cheryl LaFleur**, Former Chairman, Federal Energy Regulatory Commission (FERC)  
**Commissioner Allison Herren Lee**, Securities & Exchange Commission  
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**Hon. Gina McCarthy**, National Climate Advisor, The White House  
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**Jim Fitterling**, Chairman & CEO, Dow

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**Jack Fusco**, President & CEO, Cheniere Energy  
**Ignacio Galán**, Chairman & CEO, Iberdrola, S.A.  
**Maria Rita Galli**, CEO, DESFA  
**Miguel Matías Galuccio**, Chairman & General Director, Vista Oil & Gas SA de CV; Former Chairman & CEO, YPF  
**Greg Garland**, Chairman & CEO, Phillips 66  
**Seifi Ghasemi**, Chairman, President & CEO, Air Products & Chemicals  
**Russ Girling**, President & CEO, TransCanada  
**Andrés Gluski**, President & CEO, AES  
**Lynn Good**, Chairman, President & CEO, Duke Energy  
**Hendrick Gordenker**, Executive Chairman, JERA  
**Mauricio Gutierrez**, President & CEO, NRG Energy  
**Mark Gyetvay**, CEO & Deputy Chairman, Management Board, NOVATEK  
**Harold Hamm**, Chairman & CEO, Continental Resources  
**Gary Heminger**, Chairman & CEO, Marathon Petroleum  
**John Hess**, CEO, Hess Corporation  
**Thad Hill**, President & CEO, Calpine Corporation  
**Vicki Hollub**, President & CEO, Occidental Petroleum  
**Tetsuhiro Hosono**, Chairman & CEO, JOGMEC  
**Hunter Hunt**, Chairman & CEO, Hunt Consolidated Energy  
**Ralph Izzo**, Chairman, President & CEO, Public Service Enterprise Group (PSEG)  
**Glenn Kellow**, President & CEO, Peabody  
**Badar Khan**, President, National Grid, US  
**Richard Kinder**, Co-Founder, Chairman & CEO, Kinder Morgan  
**Bill Klesse**, Chairman & CEO, Valero Energy  
**Isabelle Kocher**, CEO, Engie  
**Mele Kyari**, Group Managing Director, Nigerian National Petroleum Corporation (NNPC)  
**Ryan Lance**, Chairman & CEO, ConocoPhillips  
**Gertjan Lankhorst**, Former CEO, GasTerra

**Olivier Le Peuch**, CEO, Schlumberger  
**Jean-Bernard Lévy**, CEO & Chairman, EDF  
**Fanrong Li**, CEO & President, CNOOC  
**Mark Little**, President & CEO, Suncor Energy  
**Zhenya Liu**, President & CEO, State Grid, China  
**Bernard Looney**, Group Chief Executive, bp plc  
**Jeffrey Lyash**, President & CEO, Ontario Power Generation  
**Mpho Makwana**, Chairman, Eskom Holding  
**Jaime Francisco Hernández Martínez**, General Director, CFE  
**Sebastião Gaspar Martins**, Chairman, Sonangol  
**Frank Mastiaux**, CEO & Chairman, EnBW Energie Baden-Württemberg AG  
**Alexander Medvedev**, Deputy Chairman, Management Committee, Gazprom  
**Mario Mehren**, Chairman & CEO, Wintershall Holding  
**Tania Ortíz Mena**, CEO, IEnova  
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**Al Monaco**, President & CEO, Enbridge  
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**Amin Nasser**, President & CEO, Saudi Aramco  
**Anders Opedal**, President & CEO, Equinor  
**Paddy Padmanathan**, CEO & President, ACWA  
**Surya Panditi**, President & CEO, Enel X NA  
**Bhavesh V. (Bob) Patel**, CEO, LyondellBasell Industries  
**Pedro Pizarro**, President & CEO, Edison International  
**Maria Pope**, President & CEO, Portland General Electric  
**Patti Poppe**, CEO, PG&E  
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**Robert Shapard**, Chairman & CEO, Oncor  
**Scott Sheffield**, Chairman & CEO, Pioneer Natural Resources  
**Eric Silagy**, President & CEO, Florida Power & Light  
**Sanjiv Singh**, Group President, Reliance Industries Ltd.  
**Sumant Sinha**, Chairman & CEO, ReNew Power  
**Michael Smith**, Founder, Chairman & CEO, Freeport LNG  
**Charif Souki**, Chairman, Tellurian  
**M.K. Surana**, Chairman & Managing Director, Hindustan Petroleum Corporation  
**Doug Suttles**, President & CEO, EnCana  
**Tengku Muhammad Taufik**, President & Group CEO, PETRONAS  
**Jim Teague**, Co-CEO, Enterprise Products Holdings  
**Ernie Thrasher**, CEO & Chief Marketing Officer, Xcoal & XLNG Energy & Resources  
**Carlos Treviño**, CEO, PEMEX  
**B.C. Tripathi**, Chairman & Managing Director, GAIL (India)  
**S.M. Vaidya**, Chairman, Indian Oil Corporation  
**Ben van Beurden**, CEO, Royal Dutch Shell  
**Gordon van Welie**, President & CEO, ISO New England  
**Jeff Ventura**, Chairman, President & CEO, Range Resources  
**Christina Verchere**, CEO & President of the Executive Board, OMV Petrom  
**Pat Vincent-Collawn**, Chairman, President & CEO, PNM, Resources  
**Yilin Wang**, Chairman, CNPC  
**Kelcy Warren**, Chair & CEO, Energy Transfer Partners  
**Jeremy Weir**, CEO, Trafigura Group  
**Geisha Williams**, President & CEO, PG&E  
**Michael Wirth**, Chairman & CEO, Chevron  
**Darren Woods**, Chairman & CEO, ExxonMobil  
**Jiping Zhou**, Chairman, President, China National Petroleum

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## Technology, Mobility, and Renewables Leaders

**Mahpuzah Abai**, CEO, PETRONAS Technology Ventures  
**Ahmad Al Khowaiter**, Chief Technology Officer, Saudi Aramco  
**Mary Barra**, Chairman & CEO, General Motors  
**Laura Beane**, Chief Renewables Officer, ENGIE  
**Barbara Burger**, President, Chevron Tech. Ventures  
**Ditlev Engel**, CEO, Energy Business Area, DNV GL Group; Former President & CEO, Vestas Wind Systems  
**David Farr**, Chairman & CEO, Emerson  
**William Clay Ford Jr.**, Executive Chairman, Ford Motor Company  
**Ric Fulop**, Founder & CEO, Desktop Metal  
**Craig Hayman**, Former CEO, AVEVA  
**Jon Hirschtick**, Co-Founder & General Manager, OnShape; Founder, SolidWorks  
**Jennifer Holmgren**, CEO, LanzaTech  
**Andrew Jassy**, CEO, Amazon Web Services

**Joe Kaeser**, President & CEO, Siemens  
**Amitabh Kant**, CEO, National Institution for Transforming India (NITI Aayog)  
**Scott Kirby**, CEO, United Airlines  
**Maria Korsnick**, President & CEO, Nuclear Energy Institute  
**Rajiv Kumar**, Vice Chairman, National Institution for Transforming India (NITI Aayog)  
**John Markus Lervik**, Co-Founder & CEO, Cognite  
**Shunichi Miyanaga**, President & CEO, Mitsubishi Heavy Industries  
**Doug Oberhelman**, Former Chairman & CEO, Caterpillar  
**Antonio Pietri**, President & CEO, Aspen Technology  
**Daniel Poneman**, President & CEO, Centrus Energy  
**Mary Quaney**, Group CEO, Mainstream Renewable Power  
**Dr. Pratima Rangarajan**, CEO, OGCI

**Suruchi Rao**, Co-Founder & CEO, Ossus Biorenewables  
**Emily Reichert**, CEO, Greentown Labs  
**Pasquale Romano**, President & CEO, ChargePoint  
**Lorenzo Simonelli**, Chairman & CEO, Baker Hughes  
**Fred Smith**, Chairman & CEO, FedEx  
**Ulrich Spiesshofer**, President & CEO, ABB  
**JB Straubel**, Co-Founder & CTO, Tesla Motors  
**Vijay Swarup**, Vice President of Research & Development, ExxonMobil  
**Peter Terwiesch**, President, Industrial Automation & Member of the Group Executive Committee, ABB  
**Jean-Pascal Tricoire**, Chairman & CEO, Schneider Electric  
**Jason Zander**, Executive Vice President, Microsoft Azure, Microsoft

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## Finance Leaders

**HE Yasir Othman Al-Rumayyan**, Governor of the Public Investment Fund; Chairman, Saudi Aramco

**Musabbeh Al Kaabi**, CEO, UAE Investments, Mubadala Investment Company

**Poppy Allonby, CFA**, Managing Director; Portfolio Manager, BlackRock

**Samir Assaf**, Chairman, Corporate & Institutional Banking, HSBC

**Jim Barry**, Managing Director; Chief Investment Officer, BlackRock Alternatives Investors (BAI); Global Head, BlackRock Real Assets

**Ben Bernanke**, Former US Chairman of the Federal Reserve System

**Peter Bowden**, Managing Director & Global Head of Energy Investment Banking, Jefferies

**Mark Carney**, Adviser to Prime Minister, COP 26; UN Special Envoy Climate & Finance

**Stanley Fischer**, Former Vice Chairman, Federal Reserve Board

**Thomas Gottstein**, CEO, Credit Suisse

**Maynard Holt**, CEO, Tudor, Pickering, Holt & Co.

**Jeffrey Holzschuh**, Chairman, Institutional Securities Group, Morgan Stanley

**Lydie Hudson**, CEO Sustainability, Research & Investment Solutions, Credit Suisse

**Robert Kaplan**, President & CEO, Federal Reserve Bank of Dallas

**Daniel McCarthy**, Managing Director & Vice Chairman, Investment Banking, National Bank Financial of Canada

**J.R. Rickertsen**, Managing Director, Energy Corporate Banking, BofA Securities

**Salim Samaha**, Partner, Global Infrastructure Partners

**David Solomon**, Chairman & CEO, Goldman Sachs

**Peter Thiel**, Investor & Entrepreneur, Founders Fund

**Marcel van Poecke**, Head, Carlyle International Energy Partners (CIEP)

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## Thought Leaders

**Noubar Afeyan**, Co-Founder & Chairman, Moderna; Founder & CEO, Flagship Pioneering

**Keith Alexander**, Former Director, US Cyber Command

**Robert Armstrong**, Director, MIT Energy Initiative

**James Bellingham**, Director, Center for Marine Robotics, Woods Hole Oceanographic Institution

**Dr. Fatih Birol**, Executive Director, IEA

**Jason Bordoff**, Professor of Professional Practice in International & Public Affairs & Founding Director, Center on Global Energy Policy, Columbia University

**Ambassador William Burns**, President, Carnegie Endowment for International Peace

**Nicholas Eberstadt**, Henry Wendt Chair in Political Economy, American Enterprise Institute

**Patricia Espinosa**, Executive Secretary, UNFCCC

**Bill Gates**, Co-Chair, Bill & Melinda Gates Foundation

**Richard Haass**, President, Council on Foreign Relations

**Karen Harbert**, President & CEO, American Gas Assoc.

**Susan Hockfield**, President Emerita; Professor, MIT

**Walter Isaacson**, Author; Professor, Tulane University

**Joo-Myung (Joe) Kang**, President, International Gas Union

**Fred Krupp**, President, Environmental Defense Fund

**Sarah Ladislaw**, Senior Vice President & Director, Energy Security & Climate Change Program, Center for Strategic & International Studies

**Arun Majumdar**, Jay Precourt Professor; Co-Director, Precourt Institute for Energy, Stanford University

**Mark Mills**, Senior Fellow, Manhattan Institute & Faculty Fellow, Northwestern University's McCormick School of Engineering and Applied Science; Strategic Partner, Cottonwood Venture Partners

**Ernest Moniz**, Former US Secretary of Energy, President & CEO, Energy Futures Initiative

**Sunita Narain**, Director General, Centre for Science and Environment

**Richard Newell**, President & CEO, Resources for the Future

**Meghan O'Sullivan**, Jeane Kirkpatrick Professor of the Practice of International Affairs, Director of the Geopolitics of Energy Project, North American Chair of the Trilateral Commission, Harvard University's Kennedy School

**Peter Rodriguez**, Dean & Professor of Strategic Management, Jesse H. Jones Graduate School of Business, Rice University

**Susan Schwab**, Strategic Advisor, Mayer Brown LLP; Professor Emerita, University of Maryland

**Adam Sieminski**, President, KAPSARC

**Vaclav Smil**, Distinguished Professor Emeritus, University of Manitoba

**Mike Sommers**, President & CEO, American Petroleum Institute

**Angela Stent**, Director, Center for Eurasian, Russian & East European Studies, Georgetown University

**David Victor**, Professor, Center for Global Transformation Endowed Chair in Innovation and Public Policy; Co-Director, Deep Decarbonization Initiative, University of San Diego

**Maria Zuber**, Vice President for Research & E.A. Griswold Professor of Geophysics MIT; Co-Chair, President's Council of Advisors on Science and Technology (PCAST)

Message

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**From:** Utech.Dan@epa.gov [Utech.Dan@epa.gov]  
**Sent:** 10/28/2021 11:55:11 AM  
**To:** Niebling, William [Niebling.William@epa.gov]  
**Subject:** Re: STATUS UPDATE-Lead Strategy

Thanks. CBC is off because of dem caucus on bbb

On Oct 28, 2021, at 7:07 AM, Niebling, William <Niebling.William@epa.gov> wrote:

OMB has cleared.

On Oct 27, 2021, at 7:16 PM, Jordan, Deborah <Jordan.Deborah@epa.gov> wrote:

Step 1 was completed at 3 pm EDT; we're fairly certain step 2 happened shortly thereafter. We expect step 3 to happen later this evening or tomorrow a.m.

Anything to add, William?

Thank you all for your help.

Deborah Jordan, Ph.D.  
Deputy Regional Administrator/Acting Regional Administrator  
U.S. EPA Region 9 / Pacific Southwest  
75 Hawthorne Street (ORA)  
San Francisco, CA 94105  
415-297-5237 (mobile)

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**From:** Cassady, Alison <Cassady.Alison@epa.gov>  
**Sent:** Wednesday, October 27, 2021 4:02 PM  
**To:** Niebling, William <Niebling.William@epa.gov>  
**Cc:** Utech, Dan <Utech.Dan@epa.gov>; Waterhouse, Carlton <Waterhouse.Carlton@epa.gov>; Jordan, Deborah <Jordan.Deborah@epa.gov>; Fox, Radhika <Fox.Radhika@epa.gov>  
**Subject:** Re: STATUS UPDATE-Lead Strategy

What the current status of this?

Thanks,  
AC

Alison L. Cassady  
(202) 941-6036

On Oct 27, 2021, at 3:04 PM, Niebling, William <Niebling.William@epa.gov> wrote:

fyi

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**From:** Snyder, Raquel <Snyder.Raquel@epa.gov>  
**Sent:** Wednesday, October 27, 2021 3:01 PM  
**To:** Niebling, William <Niebling.William@epa.gov>  
**Cc:** Levine, Carolyn <Levine.Carolyn@epa.gov>  
**Subject:** STATUS UPDATE-Lead Strategy

Good afternoon,

As promised, a quick update on the OMB call concerning this matter. We seem to finally be back on track and the draft strategy/report should clear OMB before tomorrow but before that happens, three things must transpire:

- 1) EPA provides to OMB the most current draft, final tweaks being made now by OLEM;
- 2) OMB will send the doc and close the loop with HHS and HUD;
- 3) After 1 & 2 occur, OIRA will review the final doc and clear barring any unforeseen issues.

Many thanks,

Raquel Snyder  
Congressional Liaison  
U.S. EPA/Office of Congressional Affairs  
(202)564-9586

Message

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**From:** Utech, Dan [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=355649AB49D340E7AB667E52A9CEE6A9-UTECH, DAN]  
**Sent:** 10/28/2021 8:29:49 PM  
**To:** Blythers, Dorian [Blythers.Dorian@epa.gov]  
**Subject:** FW: FY22 Agency Budgets and Travel Process Discussion

You should be on this as well. Either Monday slot work for you?

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**From:** Doyle, Solis A. EOP/WHO **Ex. 6 Personal Privacy (PP)**  
**Sent:** Thursday, October 28, 2021 4:25 PM  
**To:** Utech, Dan <Utech.Dan@epa.gov>  
**Subject:** RE: FY22 Agency Budgets and Travel Process Discussion

Hi Dan,

Hope you've had a great week. I wanted to bring this request to the top of your inbox.

Thanks,

**Solis Doyle** (she/her)  
Confidential Assistant  
Office of Cabinet Affairs, EEOB 161

**Ex. 6 Personal Privacy (PP)**

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**From:** Doyle, Solis A. EOP/WHO  
**Sent:** Monday, October 25, 2021 5:43 PM  
**To:** 'utech.dan@epa.gov' <utech.dan@epa.gov>  
**Subject:** FY22 Agency Budgets and Travel Process Discussion

Hi Dan,

Hope your week is off to a great start. I'm reaching out to set up 15 minutes for Cabinet Affairs, Management & Administration, and the Office of the Vice President to connect with you on the FY22 budget and process as they pertain to potential upcoming agency reimbursable travel.

Please let me know which of the following time slots work for you (at least 3) and I will revert confirming the time of your call. If you cannot make any time below work, please let me know and we can work together to find another time.

- Monday, November 1<sup>st</sup>
  - 3-3:15pm
  - 3:15-3:30pm
- Tuesday, November 2<sup>nd</sup>
  - 1-1:15pm
  - 1:15-1:30pm
  - 5-5:15pm
  - 5:15-5:30pm
- Wednesday, November 3<sup>rd</sup>
  - 11-11:15am
  - 11:15-11:30am
  - 11:30-11:45am
  - 11:45am-12:00pm

- Thursday, November 4<sup>th</sup>
  - 1-1:15pm
  - 1:15-1:30pm

Thanks,

**Solis Doyle** (she/her)

Confidential Assistant

Office of Cabinet Affairs, EEOB 161

**Ex. 6 Personal Privacy (PP)**